



California Regional Water Quality Control Board

Los Angeles Region



Linda S. Adams
Cal/EPA Secretary

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Arnold Schwarzenegger
Governor

August 3, 2010

California Department of Fish and Game
Newhall Ranch EIS/EIR Project Comments
Attn: Dennis Bedford
4949 Viewridge Avenue
San Diego, CA 92123

SENT VIA FACSIMILE: 858-467-4203

US Army Corps of Engineers
Ventura Field Office
Attn: Aaron Allen
2151 Allesandro Drive, Suite 110
Ventura, CA 93001

SENT VIA FACSIMILE: 805-585-2154

**COMMENTS ON THE FINAL JOINT ENVIRONMENTAL IMPACT STATEMENT
AND ENVIRONMENTAL IMPACT REPORT FOR NEWHALL RANCH RESOURCE
MANAGEMENT AND DEVELOPMENT PLAN (ADMINISTRATIVE DRAFT 404(b)(1)
ALTERNATIVES ANALYSIS AND LEDPA) SCH. NO. 2000011025**

Thank you for the opportunity to comment on the Final Joint Environmental Impact Statement and Environmental Impact Report for the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan and Administrative Draft of the Clean Water Act Section 404(b)(1) Alternatives Analysis (Final EIS/EIR). The Los Angeles Regional Water Quality Control Board (Regional Board) finds this analysis of the Newhall Ranch project and the Draft Least Environmentally Damaging Practicable Alternative (LEDPA) to be inadequate for a final CEQA determination.

The mission of the Regional Board is to protect beneficial uses within the Los Angeles Region consistent with the Federal Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act, which requires careful consideration of projects which result in hydrogeomorphic changes and related adverse impacts to water quality and beneficial uses of waters of the State. Therefore, while we have reviewed the proposed Final EIS/EIR and your response to our comment letter of August 25, 2009, we have also reviewed the information in the Final EIS/EIR in light of the information which we will need to prepare a Clean Water Act Section 401 Water Quality Certification.

California Environmental Protection Agency



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Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

SEP 17 2009

OFFICE OF THE
REGIONAL ADMINISTRATOR

Colonel Thomas H. Magness
District Engineer, Los Angeles District
U.S. Army Corps of Engineers
PO Box 532711
Los Angeles, California 90053-2325

Subject: Permit Application No. 2003-01264-AOA for the proposed Newhall Ranch Management and Development Plan, Los Angeles County, California

Dear Colonel Magness:

On August 24, 2009, EPA provided written comments regarding the proposed Newhall Ranch project (enclosed). The applicant, Newhall Land and Farming Company, proposes to fill/impact approximately 82.3 acres of waters of the United States (including wetlands) in conjunction with the construction of the Newhall Ranch Project, a master-planned development encompassing approximately 12,000 acres along the Santa Clara River in unincorporated Los Angeles County. The comments provided identified concerns regarding potential adverse project impacts to waters, and the proposed project's compliance with the Federal Guidelines (40 CFR 230) promulgated under Section 404(b)(1) of the Clean Water Act (CWA). The letter concluded, that based upon the available information, the project may result in substantial and unacceptable impacts to an aquatic resource of national importance (ARNI).

These concerns were reiterated in a second comment letter to your agency, dated 1 September 2009, as part of our review of the project's Draft Environmental Impacts Statement (DEIS) (also enclosed).

We have been working in coordination with the Los Angeles District and the applicant to obtain additional project information. However, given the complexity of the project and the short time allowed under the MOA to resolve initial concerns, no additional substantive information has yet been presented. Therefore, we must act to preserve our authority to elevate the proposed permit in the event that our environmental concerns are not resolved. We respectfully reaffirm our objections to permit approval for the Newhall Ranch Project on the basis that the authorization **will** have substantial and unacceptable impacts to an ARNI.

We look forward to working with you, your staff, and the applicant to resolve the important environmental issues concerning the proposed project. If you wish to discuss this matter further, please call me at (415) 972-3572, or have your staff contact David W. Smith, Chief of our Wetlands Office, at (415) 972-3464.

Sincerely,

A handwritten signature in black ink, appearing to read "Laura Yoshii".

Laura Yoshii
Acting Regional Administrator

Enclosure

cc:

Aaron Allen, North Coast Branch Chief
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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AUG 6 2010

OFFICE OF THE
REGIONAL ADMINISTRATOR

Colonel R. Mark Toy
District Engineer, Los Angeles District
U.S. Army Corps of Engineers
P.O. Box 532711
Los Angeles, California 90053-2325

Subject: Final Environmental Impact Statement (FEIS) for the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan, Santa Clarita, California. (CEQ # 20100224)

Dear Colonel Toy:

Mark -

The U.S. Environmental Protection Agency (EPA) has reviewed the above referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our comments were also prepared in accordance with the provisions of the Federal Guidelines promulgated at 40 CFR 230 under Section 404(b)(1) of the Clean Water Act (CWA).

EPA reviewed the Draft Environmental Impact Statement (DEIS) for Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (Project) and provided comments on September 1, 2009. We rated the document EO-2, Environmental Objections – Insufficient Information based on potential impacts to aquatic resources of national importance that should be avoided. I appreciate the efforts of the U.S. Army Corps of Engineers (USACE) and the project applicant Newhall Land and Farming Company (Newhall) to coordinate with EPA staff prior to and during the review of the Project FEIS, including several meetings and phone calls. Nevertheless, based on our review of the FEIS, many issues regarding the significant environmental impacts identified in our comments on the DEIS remain unresolved.

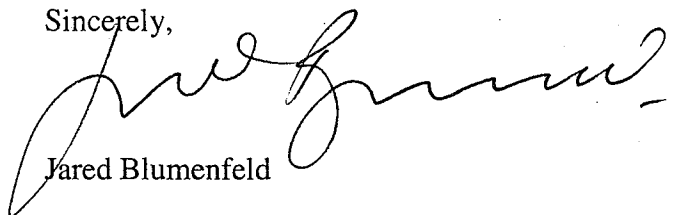
The FEIS identifies Modified Alternative 3 as the USACE's Preferred Alternative (Section 5.0-73) and Draft Least Environmentally Damaging Practicable Alternative (LEDPA). This alternative would result in substantial impacts to waters of the United States (WUS) and the 100-year floodplain of the Santa Clara River. EPA believes that many of those impacts may be avoidable, and we continue to be particularly concerned about the proposed development impacts in Potrero Canyon. The FEIS has not demonstrated that additional avoidance and minimization of impacts to jurisdictional waters are impracticable. Furthermore, the Draft Mitigation Plan does not meet the minimum federal requirements for a mitigation plan as set forth at 40 CFR Part 230. A major feature of the proposed mitigation plan is assessing mitigation credit for "reconstructed"

drainage channels on top of fill. We do not believe that the Corps has shown that these flood control facilities will replace the ecological functions provided by the existing natural features. In addition, the quality of the Santa Clara River is impaired at the site of the proposed project, and the FEIS does not provide adequate assurance that surface water quality will be protected from the project's stormwater discharges. We share concerns raised by the Los Angeles Regional Water Quality Control Board that more detailed information about the effects of the proposed project on water quality, and storm water management site plans, are necessary in order to determine that the project will protect water quality and not exacerbate existing water quality impairments. We concur with the USACE's finding that, from among the alternatives analyzed, Alternative 7 is the environmentally superior alternative, with "the lowest level of environmental impact in nearly all environmental resource categories." For these reasons, we do not consider Modified Alternative 3 to be the LEDPA.

In addition to the impacts on aquatic resources, we have concerns regarding impacts to the San Fernando Valley Spineflower and the lack of habitat connectivity among the Preserves proposed in Modified Alternative 3. EPA also continues to have concerns regarding air quality during construction, as well as roadway congestion and transportation impacts of the project. While the proposed project includes some elements of sustainable design, the environmental impacts that will result from the project, as a whole, are not consistent with the principles of sustainable growth. Principles for ensuring that housing and transportation goals are met while protecting the environment are identified in the Sustainable Communities Partnership Agreement signed by EPA, the Department of Housing and Urban Development, and Department of Transportation in June 2009. Examples of emission-reducing Green Building guidance resources are provided in our enclosed detailed comments. We recommend that additional emission reduction measures be included in the record of decision (ROD).

We appreciate the opportunity to review the FEIS. We anticipate receiving a draft CWA Section 404 permit and decision document from your office some time after the close of the comment period for the FEIS. We hope the attached detailed comments on the FEIS will help the Corps make a stronger permit decision that is more environmentally protective and more clearly in compliance with the CWA. This permit remains a candidate for our respective headquarters' review pursuant to our 1992 interagency agreement on CWA 404(q) procedures, and our decision to recommend such review is required within 15 days from our receipt of the draft permit. When the ROD is released, please send one electronic copy on CD to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 947-8702, or have your staff contact James Munson, the lead reviewer for this project. James can be reached at (415) 972-3800 or munson.james@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Jared Blumenfeld", is written over the printed name.

Jared Blumenfeld

Enclosures: Detailed Comments

cc: Aaron Allen, U.S. Army Corps of Engineers
Diane Noda, U.S Fish and Wildlife Service
LB Nye, Los Angeles Regional Water Quality Control Board
Ed Pert, California Department of Fish and Game
Dennis Bedford California Department of Fish and Game
Jill Whynot, South Coast Air Quality Management District
Matt Carpenter, Newhall Land and Farming Company
William Gonzalez, Fernandeno Tataviam Band of Mission Indians

Alternatives

The FEIS does not Demonstrate that No Reasonable nor Practicable Alternatives Exist

The National Environmental Policy Act (NEPA) requires an Environmental Impact Statement (EIS) to examine all reasonable alternatives to the proposed action. According to Council on Environmental Quality (CEQ) guidance, in determining the scope of alternatives to be considered, the emphasis is on what is 'reasonable' rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant, and may include alternatives that are outside the legal jurisdiction of the lead agency"¹

Similarly, alternatives must be considered pursuant to the Clean Water Act (CWA) Section 404(b)(1) Guidelines. Those Guidelines require the U.S. Army Corps of Engineers (USACE, Corps) to analyze whether there "is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences" (40 CFR 230.10(a)). An alternative will be considered "practicable" if it is "available and capable of being done, taking into consideration cost, existing technology, and logistics in light of the project purpose," (40 CFR 230.3(q)). The applicant Newhall Land and Development (Newhall) has decided to retain Alternative 2 as its proposed alternative, for continuity with Los Angeles County's Specific Plan approval; however, Newhall has asked the USACE to approve Modified Alternative 3, as defined in the FEIS² (page 3.0-148). The Guidelines require the USACE to select the "least environmentally damaging practicable alternative" (LEDPA) based on alternatives' avoidance, minimization, and, finally, mitigation for unavoidable impacts to waters of the U.S. (WUS). Based on the information provided in the FEIS, Newhall has not demonstrated compliance with the CWA Section 404(b)(1) Guidelines.

The USACE has identified Modified Alternative 3 (a modified version of the Draft EIS Alternative 3), as the Draft LEDPA; however, the USACE has also identified Alternative 7 as environmentally superior. EPA believes that further avoidance of waters than would be achieved under Modified Alternative 3 is reasonable, necessary, and practicable. As proposed, Modified Alternative 3 would install 26,539 linear feet of bank stabilization on the Santa Clara River. The FEIS also states that Modified Alternative 3 would result in the permanent fill of 66.3 acres of WUS (Page: 3.0-56), and would modify 54,001 linear feet of tributary, which is 41,091 linear feet more tributary modification than Alternative 7 (Table 5.0-1). Similarly, Modified Alternative 3 would convert 56,291 linear feet of tributary channel into buried storm drain, resulting in the burial of 36,961 linear feet more buried tributary than Alternative 7. Modified Alternative 3 would eliminate the planned Santa Clara River bridge crossing at Potrero Canyon, re-grade and realign major tributary drainages, and facilitate the development of 19,812 residential units and 5.4 million square feet of commercial area on approximately 2587 acres.

¹ Council on Environmental Quality, NEPA's 40 Most Asked Questions: #1 <http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm>

² Per telephone conversation with Aaron Allen, North Coast Branch Chief USACE

Potrero Canyon

We continue to be particularly concerned about the proposed development impacts in Potrero Canyon. While Modified Alternative 3 reduces direct impacts to Potrero Canyon from 32.8 acres to 22.9 acres, the FEIS has not demonstrated that additional avoidance and minimization of impacts to jurisdictional waters are impracticable.

Newhall's alternatives analysis broke out the costs and impacts to WUS associated with development of each of the five villages at Newhall Ranch (*i.e.* various "sub-alternatives"), including Potrero Canyon (PC) Village. This includes a "no-fill" alternative for development of Potrero Canyon (sub-alternative PC-4) at a cost of \$1.04 billion.³ In comparison, Newhall's initial proposal, Alternative 2, would develop Potrero Canyon Village at a cost of approximately \$917 million with 32.8 acres of fill in WUS,⁴ and Modified Alternative 3 (Draft LEDPA) would develop Potrero Canyon Village at a cost of \$847 million, filling 22.9 acres of WUS.⁵ The cost increases of "no-fill" sub-alternative PC-4, relative to this component in Alternative 2 and 3, are approximately \$127 million and \$197 million, respectively.

Newhall maintains that the no-fill sub-alternative PC-4 is impracticable because these cost increases are unreasonable, and it would not allow achievement of the project purpose. EPA's analysis of the facts does not support these conclusions. Inclusion of sub-alternative PC-4 in the overall project would represent an increase of approximately 4.5%⁶ in the overall project costs of Alternative 3. Newhall does not discuss why this incremental fractional cost (specific to Potrero Village) threatens the economic viability of the entire Newhall Ranch development. Newhall also does not demonstrate why 89.8 acres for residential and commercial development is necessarily lost under PC-4 within the context of a 1,590 acre village development footprint that has not yet undergone specific land planning and which may contain room for accommodating additional acreage for residential and commercial use by relocating the 455.5 acres of "manufactured" open space (and also perhaps the 362.9 acres of natural open space) provided for by PC-4.⁷ Newhall also does not adequately explain why PC-4, which provides for 709.7 acres of residential and commercial development (as opposed to 799.5 under Modified Alternative 3), prevents achievement of the project purpose when the Specific Plan (the cornerstone of the project purpose) neither dictates a specific acreage number with regard to residential and commercial development in Potrero Village, nor requires a specific number of residential units to be built at Potrero Village. We

³ Specifically, \$1,044,099,187. This alternative is referred to as "Sub-Alternative PC-4."

⁴ Specifically, \$917,435,000. See "Practicability Analysis – Additional Studies," Appendix 10, pp. 4-5, to FEIS, Appendix F10.

⁵ If the Draft LEDPA were approved, Newhall estimates \$847,220,029 in site development costs specific to Potrero Canyon Village. See Hunsacker & Associates Technical Memorandum, "Newhall Ranch 404B1 Cost Analysis Procedures, dated June 5, 2010, Table 1 (referred to as Sub-Alternative PC-1 of the Revised Initial LEDPA (the Draft LEDPA)).

⁶ How EPA arrived at 4.5 percent: Newhall proposed development of Potrero Canyon at a cost of \$917 million in the DEIS. For \$127 million more, the FEIS acknowledges that Potrero Canyon could be developed without impacts to WUS under the no-fill alternative (PC-4). \$127 million amounts to 4.5% of the total \$2.8 billion cost of the Draft LEDPA (specifically, \$2,839,620,057. See "Evaluation of Revised Initial LEDPA – Cost Detail," Appendix 9 to FEIS, Appendix F10).

⁷ FEIS Appendix F10, Figure 10-8 ("Potrero Canyon Special Study Area PC-4").

urge the Corps to reconsider the practicability of the Potrero Canyon “no-fill” sub-alternative PC-4 as part of the LEDPA for the overall project.

Consideration of revenues

The FEIS Economic Evaluation indicates that the USACE intends to decide economic viability based solely on cost estimates, without any consideration of the revenues the operation will generate while incurring the costs over a 20-year phased building schedule. Comparing costs to expected revenue would add critical context to the cost numbers and allow for more informed decision making. EPA made similar reasoning in its April 3, 2009 request to USACE Headquarters under Section 404(q) concerning the proposed Section 404 permit for the Potash Corporation of Saskatchewan Phosphate Division (“PCS”).

For additional information pertaining to waters of the U.S., please contact Eric Raffini, EPA Wetlands Regulatory Program, at (415) 972-3544, or email raffini.eric@epa.gov.

Recommendations:

- The USACE should require more rigorous analysis of the proposed final 404(b)(1) decision document and the practicability of additional impact avoidance from the applicant. In particular, “costs” should be examined in a more balanced way that takes into consideration not just outgoing but incoming funds and compares the impact of incremental cost increases of sub-alternatives against the costs of the overall project (the permit action).
- We continue to recommend that the USACE consider a hybrid of Alternative 7 and the Spineflower Conservation plan and the practicability of avoiding fill in Potrero Canyon Village.

Compensatory Mitigation for Impacts to Waters of the U.S.

Compensatory Mitigation Plan is Deficient

Under the Draft LEDPA, Newhall would create at least 66.3 acres of compensatory mitigation, of which 7.7 acres are wetlands, and restore 32.2 acres of temporarily impacted waters. The Draft Mitigation Plan included as part of the Section 404(b)(1) Alternatives Analysis (Appendix F1.0) does not meet the minimum federal requirements for a mitigation plan as set forth at 40 CFR Part 230. A complete compensatory mitigation plan must contain the following twelve elements: objectives; site selection criteria; site protection instruments; baseline information; credit determination methodology; mitigation work plan; maintenance plan; ecological performance standards; monitoring requirements; long-term management plan; adaptive management plan; and financial assurances (§230.94(c)).

Although the goals of the mitigation plan are to provide a “framework mitigation document that guides mitigation planning and implementation through all development phases,” and to “ensure that there is no net loss of acreage or functions/values from the implementation of the RMDP,” the plan does not contain sufficient detail on the proposed mitigation sites to assess whether these goals will be met. Instead, the mitigation plan presented in the FEIS is a conceptual-level planning document that defines the overall mitigation approach for the build-out of Newhall

Ranch. According to the document, detailed site-specific information that describes the mitigation approach for each site will be submitted as part of the construction notification for each phase of the Resource Management and Development Plan (RMDP). This is inconsistent with FEIS Mitigation Measure BIO-2 which states that “detailed information” regarding USACE mitigation can be found in the Draft Mitigation Plan.

For example, under the proposed plan (Section 2.2.2), Newhall would create 36.4 acres of advanced “mitigation credits” at two locations on the project site: Salt Creek Canyon and Mayo Crossing. Other than providing acreage figures of the proposed mitigation sites, there is little information regarding the goals or objective of performing mitigation at these sites. In the Salt Creek drainage, the plan states that approximately 20.4 acres of jurisdictional area will be created, but the plan does not explain the factors considered during site selection, how the acreage amount was formulated, nor how the project will address the needs of the surrounding watershed. The plan includes no information on 15.9 acres of proposed advanced mitigation at the Mayo Crossing site.

According to the phasing approach presented in the plan, mitigation performed at Salt Creek and Mayo Crossing will provide mitigation credit for the first four phases of project development including Landmark Village, Mission Village, the Utility Corridor/WRP, and Homestead South. Given that the applicant has already proceeded to develop project-level plans for Landmark Village (including preparation of the DEIR), the level of detail contained in the mitigation plan for these two proposed mitigation sites is not commensurate with the scope and scale of the impacts associated with these projects.

Mitigation Credit for Reconstructed Stream Channels

A major feature of the proposed mitigation plan is assessing mitigation credit for “reconstructed” drainage channels on top of fill. Under the Draft LEDPA, 61.8 acres of on-site tributary drainages would be permanently filled to accommodate site development. Some of these drainages will be converted to buried storm drain (56,291 linear feet) while others (54,001 linear feet) will be “reconstructed” on top of 30 feet of compacted fill material. These new “reconstructed drainages” will integrate flood control and grade stabilization (*i.e.*, a combination of drop control structure and bank stabilization) and are “designed to maintain sediment equilibrium and protect the channel bed and banks from hydromodification effects.”

The Draft Mitigation Plan provides up to 91.8 acres of “mitigation credit” for these areas and claims that “mitigation would be designed in tandem with the recreated drainage channels,” such that the design process would, “replace impacted functions and values.” Under this scenario, the project is presented as essentially self-mitigating and not requiring any additional compensatory mitigation other than what is proposed.

Although we agree that these reconstructed drainages may result in an increase in Corps-jurisdictional area, we do not believe that the Corps has shown that these flood control facilities will replace the ecological functions provided by the existing natural features.

In particular, the USACE has not shown that:

- (1) The subsurface hydrology will support establishment of self-sustaining riparian vegetation;

- (2) Reconstructed channels that contain up to 98 10-foot high grade control structures, and are confined behind bank stabilization, are ecologically equivalent to natural ephemeral tributaries;
- (3) The Hybrid Assessment of Riparian Condition (HARC) methodology is a valid tool for predicting post-project function since it is untested and lacks appropriate reference set data.

These conclusions reiterate concerns from our letter dated 8/24/09 and should be addressed in the ROD and draft CWA Section 404 permit.

Cismontane Alkali Marsh

Under the Draft LEDPA, the 4.6 acre cismontane alkali marsh (CAM) wetland in middle Potrero Canyon would be eliminated. This wetland area is a result of sheet flow that escapes the current stream channel during rain events. To compensate for impacts to this vegetation community, the mitigation plan states that an additional 19-acre CAM wetland could be established in lower Potrero Canyon adjacent to an existing wet meadow.

First, there is not enough information contained in the plan to determine whether wetland establishment in this location would be successful. Although groundwater depth may be similar to the existing wetland, the site will lack sheet flow from the stream channel. Although the surrounding sub-watershed may provide an additional source of surface hydrology, it is uncertain whether this will sustain a 19-acre wetland.

Second, the FEIS and 404(b)(1) analysis are equivocal as to whether this restoration will be completed. Under the mitigation phasing approach, the USACE asserts that restoration within Potrero Canyon is not needed (Section 2.1.1.6). Furthermore, the Corps' draft 404(b)(1) Alternatives Analysis states that this mitigation "could be implemented," while the applicant's 404(b)(1) analysis states that the proposed mitigation "would be linked" to the existing wetland. Because development in Potrero Canyon represents the last phase of the RMDP, and is not expected to occur for twenty years, it is important that the FEIS clearly specify mitigation requirements.

Mitigation Requirements

On March 31, 2008, EPA and the USACE issued revised regulations governing compensatory mitigation for authorized impacts to wetlands, streams, and other waters of the U.S. under Section 404 of the CWA (33 C.F.R. Parts 325 and 332). These regulations were designed to improve the effectiveness of compensatory mitigation to replace lost aquatic resource functions and area, expand public participation in compensatory mitigation decision making, and increase the efficiency and predictability of the mitigation project review process.

While the DEIS originally stated that the applicant would comply with the 2008 mitigation regulation, Section 4.6 of the FEIS includes new language stating that because the applicant filed its Section 404 permit application in 2003, the Corps has determined that the project is not subject to the rule. Instead, the Corps will evaluate the applicant's mitigation proposal against previously issued mitigation guidance (Corps' Regulatory Guidance Letter No. 02-02 and the Los Angeles District's 2004 Mitigation Guideline and Monitoring Requirements).

Because implementation of the RMDP would involve various phases over a 20 year period, the applicant has requested a long-term Section 404 permit for its proposed discharges of fill material. According to the Draft Mitigation Plan, site-specific mitigation plans will be prepared as part of the preconstruction notification for each individual development component of the RMDP. EPA disagrees with the Corps' assessment and believes that due to the extended period of project build-out and long-term Section 404 permit, site-specific mitigation plans should comply with current regulations. However, EPA also believes that the mitigation, as proposed, is not consistent with pre-rule mitigation policies and guidance.

Recommendations:

- The ROD should include detailed mitigation plans that include the twelve elements specified at 40 CFR 230 for each area proposed for compensatory mitigation (including Salt Creek and Mayo Crossing).
- The USACE should not approve the use of reconstructed flood control channels as compensatory mitigation for permanent impacts to waters of the U.S.
- If there are unavoidable impacts to the CAM wetland in Potrero Canyon, the ROD should clearly state the applicant's mitigation obligation to compensate for these impacts.
- The ROD should require site-specific mitigation plans to meet all federal and State compensatory mitigation requirements that are in effect at the time of submittal or preconstruction notification.

Floodplain, Executive Order 11988

Floodplain Management Executive Order 11988 was adopted to avoid impacts associated with the occupancy and modification of floodplains. The FEIS states that Modified Alternative 3 would result in a net loss of 109.6 acres of the Santa Clara River FEMA 100-year floodplain. The EPA considers the loss of 109.6 acres of FEMA floodplain to be inconsistent with the intent of Executive Order 11988.

The FEIS references a 14-year-old Flood Insurance Rate Map (FIRM) map, illustrated in 1996, that was revised by Sikand Engineering. A Letter of Map Revision (LOMR) is mentioned, but little detail is given as to the revisions made nor if it was FEMA approved (page 4.1-29). The ROD should include a floodplain assessment based on the most current FEMA FIRM. Per *FIRM 06037C0800F Los Angeles County Unincorporated & Incorporated 09/26/2008*, the project area could affect the Zone A 100 year floodplain of tributaries to the Santa Clara River. The Santa Clara River floodplain is, itself an established Zone A 100 year floodplain. EPA is concerned that the project could increase flood risk to communities such as Piru, Fillmore, El Rio, Santa Paula, and Ventura, downstream of the Project, due to fill-related floodway modifications. Work in the floodway requires a "no-rise" certification (Title 44 Vol. 1 Part 60 Section 60.3(d)(3)). For more information, go to: http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/no_rise.shtm.

Recommendations:

- The USACE should refrain from permitting a project alternative that would result in the loss of 109.6 acres of the FEMA floodplain and, instead, consider alternatives that avoid fill or that increase FEMA floodplain area.

- Conduct an engineering analysis to comply with no-rise certification.

Bank Stabilization

Modified Alternative 3 would call for over 14 miles of bank stabilization (page 3.0-150). Riprap and buried riprap should be avoided on channel banks to the maximum extent practicable. The EPA recognizes the need to prevent erosion at bridge abutments and outfall locations to reduce future maintenance and repair of these structures; however, we strongly encourage the USACE to not permit the use of riprap to reinforce tributary confluences along the Santa Clara River, and the associated maintenance roads that would be constructed. Riprap bank protection reduces the habitat functions and values provided by natural vegetated banks and should be reserved for areas where there is little to no allowance for erosion. It is often ineffective and results in unintended stream alterations downstream; buried bank stabilization also results in soil being washed away downstream. EPA recommends the USACE include in the LEDPA and ROD a commitment to minimize the use of riprap and hard armoring, and to use alternative techniques that incorporate natural functionality with modern engineering to prevent erosion.

Recommendation:

- The USACE should explore alternative techniques that incorporate natural functionality with modern engineering to prevent erosion, such as bioengineering, hydroseeding, controlled planting, and construction of engineered log placement. For more information, go to: <http://www.marylandstreams.org/PDF/FEMARiprapalternatives.pdf>.

Water Quality, Stormwater, and Low Impact Development

EPA has fundamental concerns that the project will not protect surface water quality in the Santa Clara River from stormwater runoff. According to Table 4.4-15 of the FEIS, even after incorporation of project design features, post-development average annual stormwater runoff volume from the project will increase by 257% (1,302 acre-ft to 3,356 acre-ft). In its scoping comments on the DEIS, EPA recommended that the USACE commit to increasing the use of low impact development (LID) techniques, to reduce the potential impacts of stormwater discharges on jurisdictional waters. In response, the FEIS includes an analysis (Appendix 4.4) that states that the project will comply with the LID performance standard established by the Los Angeles County Department of Public Works (LACDPW), with the implication that this should be considered sufficient use of LID. As discussed below, we continue to have concerns with the level of LID incorporated into the project, and the impacts of stormwater discharges.

One of our major concerns is that the FEIS does not provide sufficient details or commitments to determine whether the Project will comply with applicable State water quality standards. The applicant has proposed a three-tier approach to managing stormwater across the Specific Plan area. Tier 1, included as part of the FEIS, involves the preparation of a programmatic Newhall Land Specific Plan Sub-Regional Stormwater Mitigation Plan, April 2008 (Sub-Regional Plan) including conceptual Best Management Practices (BMPs) to manage and treat stormwater runoff. According to this Sub-Regional Plan, specific information regarding Project Design Features, source control BMPs, and LID strategies will be developed at a later stage of project development as part of the Water Quality Technical Report and Drainage Concept Report (Tier 2).

Subsequently, Tier 3 will involve the preparation of a project-level urban stormwater mitigation plan that will be submitted to LACDPW for review and approval prior to construction. The Tier 2 and Tier 3 reports have not yet been developed and are not included as part of the FEIS.

Although the Tier 1 Sub-Regional Plan includes information on an array of standard BMPs that may be implemented, there is no village scale-specific information on how these conceptual BMPs will be applied nor any guarantee that they will be implemented at the project level (tract-scale level). Without this level of detail, the FEIS does not contain adequate assurances that impacts to surface water quality of the Santa Clara River will be addressed.

Prior to issuing the Section 404 permit for the Project, the Corps will need a certification pursuant to section 401 of the CWA from the California Regional Water Quality Control Board, Los Angeles Region (LA Regional Board) that the project will comply with applicable water quality standards. It is EPA's understanding that the LA Regional Board will incorporate its 401 certification into adopted Waste Discharge Requirements. The L.A. Regional Board's November 26, 2007 letter describes the achievements that must be attained by Tier 2 and Tier 3 implementation. The FEIS does not provide assurances that these achievements will be attained. Based on the LA Regional Board's 11/26/07 letter, the Tier 2 Plan will need to be submitted in order for the Regional Board to consider whether the Project qualifies for a 401 certification.

Consistent with the 2008 National Research Council report entitled Urban Stormwater Management in the United States, EPA is recommending stormwater management measures which infiltrate, evapotranspire, or harvest and reuse urban stormwater to reduce pollutant loads in the stormwater discharges and minimize changes in stream hydrology associated with urbanization. Such techniques are often referred to as LID or green infrastructure. In addition to water quality improvement and benefits for stream hydrology, numerous other benefits have been identified from LID, including increased groundwater recharge, water conservation, air quality improvement, and reduced energy use. The LACDPW LID Standards Manual (County LID Manual) includes recommendations similar to those of EPA, notably that LID tools mimic pre-development hydrology. The County LID Manual recommends BMPs that promote infiltration as the first priority, followed by reuse of stormwater where infiltration is not feasible.

One disadvantage of the County LID Manual is that it does not include specific offsite mitigation requirements if use of LID is found to be technically infeasible at a project site. Where LID is technically infeasible, offsite mitigation should be required within the same sub-watershed as the project site to address the volume that could not be addressed by LID techniques. This approach has been adopted by several southern California Regional Water Quality Control Boards in renewed municipal stormwater permits for Ventura County, Orange County, Riverside County, and San Bernadino County.

Table 3 (Appendix F4.4.03, Page 2) of the FEIS summarizes the performance of the proposed stormwater BMPs for the project, which are claimed to be equivalent to the requirements of the County LID Manual. However, this level of performance does not reflect the full potential of LID strategies. Table 3 (Appendix F4.4.03, Page 13) shows that of the 48 percent of the stormwater captured by the hypothetical LID BMPs required by the County LID Manual for the design storm (85th percentile 24-hour storm, or 0.75 inch of rain), only about 34 percent would actually be infiltrated, with the remainder discharged. Such performance would be far short of what is required

by recently adopted southern California municipal stormwater permits, and would necessitate the implementation of alternative compliance measures such as offsite mitigation projects. We also question whether this level of performance represents what is truly technically feasible.

A report by Dr. Richard Horner entitled *Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices* for Ventura County shows that infiltration of the entire stormwater design should be feasible for a largely residential development such as the Newhall Ranch Specific Plan area. The Horner report also shows the substantial reduction in pollutant loadings to receiving waters achieved by infiltration of stormwater as opposed to discharge.

The water quality model referenced in Section 4.4 (Page 4.4-85) of the FEIS does not accurately predict post-development conditions. To estimate pollutant loads and concentrations in stormwater runoff, this model was developed and included as part of the Sub-Regional Plan. The model is conceptual and is based largely on assumptions regarding the placement and effectiveness of BMPs and the Project Design Features. However, because the locations of vegetated swales, bioretention areas, and other LID strategies were unknown, the model assumed that all runoff would be treated through dry-extended detention basins. This assumption does not realistically reflect the true post-project condition that would be achieved with reasonable use of LID techniques. This model provides little value, but illustrates why it is important that the FEIS provide commitments that village scale-specific LID performance criteria be met to ensure that post development stormwater runoff does not contribute to water quality impairments.

Recommendations:

- The ROD should provide a village-scale quantitative estimate of the benefits of LID practices in promoting infiltration, capture/reuse, and evapotranspiration of storm flows while reducing discharges.
- The ROD should commit to management of the full 85th percentile 24-hour storm via LID unless this can be shown to be technically infeasible.
- Where LID is demonstrated to be technically infeasible, offsite mitigation projects should be required within the same sub-watershed to infiltrate, capture/reuse, and/or evapotranspire the volume that cannot be feasibly addressed by LID tools onsite.
- The ROD should provide detailed hydraulics or hydrology modeling on post-development or alternative scenarios that utilize LID principles.
- The ROD should include Tier 2 Water Quality Technical Reports (WQTR) including the level of detail specified in the LA Regional Board's November 26, 2007 letter.
- WQTRs should include schematic drawings that describe how parks and open space areas combined with on-site controls provide for overall water quality treatment and improvements for storm water runoff.
- WQTRs should describe the long-term plan for maintenance of water quality control measures and any maintenance agreements with property owners and homeowners associations.

- WQTRs should describe which site design techniques will be utilized to reduce storm water post-development runoff. For instance: reducing residential street widths from the standard practice of 36 feet to 26 feet, revisiting open space ordinances, providing vegetated open channel or dry swales at street right-of-way, minimizing the parking demand ratios for large retailers, and single-family homes, reducing overall imperviousness in parking lots, amending parking lot codes, and redirecting rooftop runoff to pervious areas to the maximum extent practicable.

Class I Injection Well Area Permit

In October 2008, Newhall submitted an application to EPA Region 9 for a Class I Non-Hazardous Underground Injection Control (UIC) Permit for injection wells to be utilized for disposal of brine from the proposed Newhall Ranch Water Reclamation Plant (WRP). Newhall submitted a revised UIC application to EPA in November 2008, and March 2009.

The WRP will use a Reverse Osmosis (RO) system to treat and reduce chloride concentrations in effluent discharge to the Santa Clara River. During the winter season, the brine concentrate generated from the RO system is proposed to be disposed of through underground well injection. The applicant has proposed two potential injection well sites. In April 2009, and in February and July 2010, EPA expressed significant concerns regarding the various proposed injection well locations because these proposed sites do not adequately protect groundwater quality. Based on the applications to date, proposed reinjection wells would not meet EPA's groundwater protection requirements and thus could not be permitted. Newhall has indicated it will revise its proposed injection well locations to address EPA's concerns.

Water Resources

In the recent past, California has experienced increased challenges trying to meet its water consumption needs. Section 4.3 notes that, in June 2008, the Metropolitan Water District of Southern California (MWD) issued a "Water Supply Alert" in Southern California urging local agencies to aggressively pursue conservation measures" (page 4.3-95). EPA questions the USACE response to comments that states that neither the "Proposed Project nor the alternatives studied would result in significant water resource impacts" (Page: RTC-006-30). Newhall and the USACE should encourage the Valencia Water Company (page: RTC-006-30) to approve the use of "purple pipe" infrastructure for residential and commercial development that could use recycled water for flushing toilets or any other non-potable water uses now or in the future.

Additional measures available to reduce water usage include high efficiency toilets, faucets, showers, and appliances in all commercial and residential developments. For additional information, we recommend referring to the EPA Water Conservation Guidelines website: <http://www.epa.gov/WaterSense/pubs/guide.html>.

Recommendation:

- The USACE should include in the final LEDPA/ROD a commitment to installation of "purple pipe" infrastructure for Project residential and commercial development that could

use recycled water for flushing toilets or any other non-potable water uses now or in the future.

Air Quality

The general conformity determination should be revised in the ROD to reflect no construction related emissions in 2008 or 2009. EPA agrees that the project emissions were included in the 2007 AQMP emissions inventories, and therefore conform to the SIP. However, the USACE needs to request a letter from the SCAQMD confirming that the project conforms to the 2007 AQMP, *i.e.*, confirming the information that is included in the general conformity determination.

Recommendations:

- Table 4.7-3 should be updated to include the following:
 - The NO₂ standard has been changed to 0.100 ppm on a 1-hour basis, and the 0.053 ppm annual arithmetic mean was retained.
 - The lead standard was changed to 0.15 ug/m³ on a rolling three month average.
 - The SO₂ standard was changed to 0.075 ppm on a 1-hour basis, and the 0.030 ppm annual arithmetic mean and the 0.14 ppm 24 hour standard were revoked.
 - The Federal Attainment Status section third paragraph on page 4.7-19 should be revised to say "the South Coast Air Basin is now designated as "extreme" nonattainment for 8-hour ozone and has until 2024 to achieve the national standard." This action was effective June 5, 2010.
 - Page 4.7-20, the South Coast Air Basin is "attainment/maintenance" for NO₂.
- Table 4.7-4 should be revised to reflect this attainment/nonattainment status:
 - 8-hour ozone: extreme
 - NO₂: attainment/maintenance
 - CO: attainment/maintenance

Biological Resources

EPA encourages the applicant and USACE to implement full conservation easements for the High Country Special Management Areas (SMA) upon permit approval to ensure preservation of SMA and to solidify the project's conservation commitment. EPA is concerned that this conservation measure is contingent upon issuance of sufficient building permits and that the High Country HMA would not be fully realized if building permits were delayed or not permitted.

Recommendation:

- The ROD should include a commitment to full implementation of conservation areas prior to the start of construction activities.

Riparian areas of the Santa Clara River consist of mature native riparian vegetation and are a part of the contiguous riparian corridor along the river. These riparian areas are critical for several

reasons, including nesting, foraging, cover, and migration, and should be preserved to the maximum extent practicable. Page 3.0-149 of the FEIS includes plans for 26,539 linear feet of buried bank stabilization that will be installed along the Santa Clara River.

Recommendation:

- The ROD should commit to the preservation of established riparian vegetation. Preservation opportunities should weigh heavily when deciding construction methods, project design, and strategic placement of bank stabilization.
- The ROD should utilize engineering techniques that incorporate preservation of riparian habitats into bank stabilization methods. See <http://www.marylandstreams.org/PDF/FEMARiprapalternatives.pdf>

Federally Listed Species

The FEIS notes that, in February 2008, the Corps initiated formal consultation with the U.S. Fish and Wildlife Service (FWS) under section 7 of the Endangered Species Act for impacts to the following threatened or endangered species, which indicates that the Corps has determined that its action is likely to adversely affect these species and/or their designated critical habitat: least Bell's vireo, unarmored threespine stickleback, arroyo toad, southwestern willow flycatcher, California red-legged frog, coastal California gnatcatcher, and California condor (page: 2.0-29). The consultation is not yet complete. As part of the LEDPA determination, the USACE must determine that the proposed project will not jeopardize the continued existence of listed species (40 CFR 230.10(b)(3)).

Recommendations:

- We encourage the Corps to relocate, reduce, or eliminate portions of the project that would adversely affect threatened, endangered, or candidate species or their potential habitat.
- We recommend that USACE reconsider its Draft LEDPA determination in light of ongoing consultation with the Fish and Wildlife Service.
- Based on the conclusions of the FEIS impacts assessment on biological resources, including protected species and their habitats, the EPA concurs with the conclusion that Alternative 7 would have substantially less impacts to biological resources. We continue to recommend the USACE consider a modified Alternative 7 that includes the Spineflower Preserves.

Spineflower Preservation

Modified Alternative 3 would result in 643.77 acres less Spineflower Preserve than Alternative 6, and 413.16 less acres than Alternative 7 (Revised Alternatives Section 3.0). EPA is concerned with lack of connectivity provided by the preserve areas as defined in Modified Alternative 3 (Figure 3.0-54).

Recommendation:

- The USACE should revise the LEDPA in the ROD to increase the size of the Spineflower preserves to promote connectivity and viable species habitat.

Green Building

EPA commends the applicant's commitment to ensure that all residential, commercial, and public buildings exceed building permit standards; however, we have concerns as to the timeline of these standards in light of the changes that may occur over the long lifespan of this project. The FEIS states that all residential buildings on the Project applicant's land holdings that are facilitated by approval of the proposed Project shall be designed to ensure that all buildings operate at levels (15%) better than the standard required by the version of Title 24 applicable at the time the building permit applications are filed (Page 8.0-131).

Recommendation:

- If there is likely to be a long delay between permit application submittal and approval, EPA recommends modifying the wording in GCC-1 and GCC-2 (Page 8.0-131) to commit to building designs that operate at 15% better than standards at the time of *permit approval* rather than when the project permit applications are filed.
- The ROD should include commitments to maximize the use of green building design. Based on the scale of the project, Newhall should commit to additional measures that target greenhouse gas emission reductions, energy conservation, water conservation, and indoor air quality. For questions on green building, please contact USEPA Residential Green Building Coordinator Leif Magnuson, EPA at (415) 972-3286 or by email at magnuson.leif@epa.gov.
- If further GHG emissions mitigation is needed, the applicant should commit to an even higher percentage of designed building energy use reduction, such as 40%. The following describes the goals of the new California Advanced Homes program: "The California Public Utilities Commission (CPUC) has directed the Investor Owned Utilities (IOUs) to encourage residential new construction to meet two visionary goals. The goals are for 50% of residential new construction to be built at least 20% better than the 2008 Title 24 Energy Code during 2011 and 10% of residential new construction to be built at least 40% better than the 2008 Title 24 Energy Code during 2011.
(http://www.sce.com/NR/rdonlyres/C9EE365D-E210-49DE-8144-6E7B20BE5658/0/2010_CAHPHandbook.pdf)

Water Conservation

In our September 1, 2009 letter regarding the DEIS, EPA provided comments related to water conservation in which we encouraged the USACE to refer to the Shappell Homes Alamo Creek development in Danville, California as an example of an implemented and aggressive conservation approach to meet the demands of the local water supplier. EPA disagrees with the FEIS statement that "the comments don't relate to the adequacy of the environmental analysis in the DEIS (Page: RTC-006-58)." The comment relates directly to the impact of residential water use.

The Shappell homes project in Danville, CA was undertaken to mitigate the water demand that the new development would place on available water supplies in the East Bay Municipal Utility District (EBMUD) territory. EBMUD, as a condition of approving the projects' access to new water supplies, required Shappell pay EBMUD over \$6000 per new home to sponsor new conservation

projects within the existing water utility service area to offset the increased water demand posed by the proposed new development.

For the Shappell Homes project, EBMUD established a water budget for the entire project of 0.45 million gallons per day (mgd) (for 1,090 homes) with the stipulation that if the entire developments' water usage exceeded that amount by 20% or more in a given year, the homeowners' association would be fined and given access to individual homeowners' water bills so that the association could determine whether high users should pay more of the fine. Each residence's water meter actually had a water budget assigned to it based on house size, number of bedrooms, bathrooms, etc. For details, see page 109 of the following article:
http://www.eid.org/doc_lib/02_dist_info/ccdocs/WaterConsvSustDevmt.pdf

For more information on the Shappell Homes project, contact Richard Harris, Water Conservation Manager, EBMUD at 510-287-1901.

Traffic

EPA comments on the DEIS included recommendations that USACE further substantiate the assumption that commuters would only travel an average of 10.7 miles each way to work when the SCAQMD regional average is 16-18 miles. Following our review of the FEIS, EPA continues to have concerns regarding the accuracy of model output of trip generation and distribution data. This is critical because this information was used as the basis for assessing roadway congestion and transportation-related impacts to environmental resources in the FEIS. Specifically, we have continuing concerns that the projected automobile emissions, as presented in the FEIS, continue to be artificially low. We also have concerns as to whether induced demand due to roadway expansion was included in traffic estimates presented in the FEIS.

The great majority of work trips generated by the project community will occur during peak congestion periods, and so are of special concern with respect to local and regional traffic congestion. The project area is essentially exurban, close enough to job centers in Los Angeles that they can be reached via a long commute. Hence jobs in the greater Los Angeles metropolitan area will provide strong work trip attraction. The closest employers outside of the Santa Clarita Valley are approximately 12 miles from the project site and downtown Los Angeles is approximately 35 miles away.

EPA is concerned with the preexisting imbalance in the Santa Clarita valley between the number of jobs and working residents; additional excess housing may lead to an increase in residents commuting from the Santa Clarita area to job locations. While Newhall Ranch will deliver both housing and jobs, it will not deliver a sufficient number of jobs to employ all of its working residents, and so it will not help to resolve the strong jobs-housing imbalance in the region.

In order to reduce commute distances, jobs and housing must be income matched. Failing this, residents will need to out-commute to find appropriate jobs elsewhere, while employees will be forced to in-commute to the project area. Consequently, the highway expansion funded in part by the Project will accommodate vehicle travel generated by the Project; however, the Project will also induce demand for additional vehicle travel from existing development.

Recommendation:

- EPA recommends the assumptions built into the travel model be delineated in the ROD. In particular, the ROD should describe how the model takes into account an income- stratified jobs and housing balance in the estimate of commuting distance and estimated emissions. For example, do jobs at the proposed nearby employment center provide income opportunities commensurate with anticipated resident incomes? Further, USACE should update the traffic projections and related mitigation measures in the ROD to reflect accurate commuting distances.
- The ROD should describe how the traffic model accounts for induced demand (both on the expanded roadway and the already-congested surrounding roadway and highway network), and confirm that impacts to environmental resources (e.g. emissions, noise) accurately reflect the increased volume of traffic anticipated due to induced demand.

National Historic Preservation Act and Executive Order 13007

Activities that involve ground disturbance or new construction will trigger historic preservation considerations. Tribal cultural artifacts are often found near rivers and waterways suitable to meet the needs of historic habitation. As stated in a comment letter to Newhall from the Fernandeno Tataviam Band of Mission Indians dated June 21, 2009, “The area along the (Santa Clara River⁸) and adjacent uplands is known to contain Native American Cultural Resources and has been documented as a traditional habitation area for close to 8,000 years.” The project has a high probability of artifact disturbance due to the proposed disturbance of over 80 thousand linear feet of ground adjacent to the Santa Clara River and many of its tributaries.

Consultation for tribal cultural resources is required under Section 106 of the National Historic Preservation Act (NHPA). Historic properties under the NHPA are properties that are included in the National Register of Historic Places (NRHP) or that meet the criteria for the National Register. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, to consult with the appropriate State Historic Preservation Officer/Tribal Historic Preservation Officer (SHPO/THPO).

Executive Order 13007, Indian Sacred Sites (May 24, 1996), requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian Religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. It is important to note that a sacred site may not meet the National Register criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site.

Consultation with Tribal Governments

Executive Order 13175, Consultation and Coordination with Indian Tribal Governments (November 6, 2000), was issued in order to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, and to strengthen the United States’ government-to-government relationships with Indian tribes. President Obama directed all federal agencies to develop an action plan to implement

⁸ Name of river confirmed by Rudy Ortega Fernandeno Tataviam Band of Mission Indians 7/30/2010

this Executive Order by February 3, 2010. For more information, refer to:
<http://www.whitehouse.gov/the-press-office/memorandum-tribal-consultation-signed-president>.

Recommendation

- EPA recommends the ROD describe the process and outcome of government-to-government consultation between the USACE and each of the tribal governments within the project area, issues that were raised (if any), and how those issues were addressed in relation to the proposed action and selection of a preferred alternative.



California Regional Water Quality Control Board

Los Angeles Region



Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Linda S. Adams
Agency Secretary

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Arnold Schwarzenegger
Governor

November 26, 2007

Matt Carpenter, Director
Environmental Resources and
Corey Harpole, Community Manager
Newhall Land and Farming Company
23823 Valencia Blvd.
Valencia, CA 91355

APPROACH TO PART 4.D.9 OF THE LOS ANGELES COUNTY MS4 PERMIT: TIERED SUBMITTAL AND APPROVAL PROCESS OF REGIONAL (OR SUBREGIONAL) STORM WATER MITIGATION PLAN OF NEWHALL LAND PROJECTS

Dear Mr. Carpenter and Mr. Harpole:

Part 4 Section D.9 of the Los Angeles County Municipal Storm Water Permit incorporates provisions for regional or subregional approaches to mitigating storm water runoff from new development or redevelopment. The sub-regional approach requires submittal of storm water mitigation plans and approval by the California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board).

We have reviewed your letter of July 10, 2007, together with the technical memorandum from Geosyntec Consultants, Inc. titled 'the Newhall Land Project Tiered Stormwater Plan Preparation', and the Newhall Ranch Specific Plan (NRSP) Regional (or sub-regional) Stormwater Mitigation Plan (RSWMP) of August 2006.

Los Angeles Water Board staff supports the three-tiered RSWMP approach, as follows:

- Tier 1 is the preparation of an informational report (Tier 1 report) prior to an Environmental Impact Report (EIR) that identifies the issues and goals, and describes any changes to the hydrology of the watershed and its sub-watersheds, stream geometry, impacts to aquatic habitat and water quality.

Los Angeles Water Board staff provided comments on the Tier 1 report in several meetings with your staff and Geosyntec Consultants. The Los Angeles Water Board staff review of the Tier 1 report indicates that it adequately frames the issues.

- Tier 2 is the preparation of an EIR that provides detailed information about the effects the proposed project is likely to have on the environment, with addenda including but not limited to a water quality technical report and a drainage concept report appended to the EIR. The two addenda should describe comprehensively the storm water management site plans (including operation and maintenance) for development activities. These plans

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should contain adequate technical information and analysis to allow the reviewing agency to determine whether the project meets the regulatory requirements.

The water quality technical report, in coordination with the EIR to be prepared, shall address the pollutants for which the Santa Clara River is impaired as included on the State's 303(d) list of Water Quality Limited Segments, the pollutants for which TMDLS have been developed including salts, nutrients and urban pesticides. The drainage concept report, in coordination with the EIR to be prepared, shall also specifically delineate how impacts to waterways, streambeds, wetlands and riparian habitat have been avoided or minimized. The water quality technical report and drainage concept report will be subject to approval of the Executive Officer, Los Angeles Water Board.

- Tier 3 is the preparation of project detail designs that (1) specify storm water better site design practices and techniques; (2) protect water quality (3) conserve and utilize natural features and resources including wetlands and riparian areas, (4) apply low impact development methods and (5) reduce impervious cover.

All detail engineering design plans will be consistent with the storm water management site plans, the water quality technical report and the drainage concept report that will be submitted in Tier 2. All detailed engineering design plans will be approved by the municipal permittee.

The Tier 2 and/or Tier 3 implementation shall achieve the following:

1. A Comprehensive approach of combining sub-regional solutions with on-site level structural Best Management Practices (BMPs) that would result in no off-site surface storm water runoff based on one of the numerical water quality mitigation criteria.
2. Permanent regional BMPs or regional solutions that are optimally sited and sized to reduce pollutant loads and designed in central location(s). For instance, multiple-use areas with public parks, ballfields, open spaces, with engineered detention basin and infiltration basin.
3. Regional BMPs combined with on-site controls provide greater overall water quality improvements and higher levels of treatment of storm water runoff than on-site controls alone.
4. Integrated water resource planning that promotes recharge of aquifer, enhance water supplies and more, given the water supply challenges in southern California.
5. Long-term plan of maintenance and responsibility agreements with property owners and home owners associations
6. Improved wildlife habitat and the creation or enhancement of public parks.



Moreover, at Tier 2, the water quality technical report and/or drainage concept report should:

1. Show the post-development drainage basin tributary to Santa Clara River (SCR) with the housing areas, streets, roads, and other landuses delineated. For instance, Homestead Village may lie partly on Long Canyon and Potrero Canyon that may form a new post-development drainage basin. These two canyons have their own pre-development tributary channels to SCR. Other portions of the villages that are planned outside (north of NRSP) that overlapped other smaller canyons that form another post-development tributary area.
2. Provide clearer presentation and discussion on how the pre- and post-development drainage basins (in acres) were derived or revised as shown in Table 1-1 in Appendix G of the NRSP. These drainage areas should be depicted through the use of overlay sheet(s) of the post-development plan against the existing delineation of the six sub-watersheds tributary to SCR. You may use report size (11"x17") sepia paper or other transparent sheet to outline the post-development condition and other land uses.
3. Develop storm water management site plans for each RSWMP (post-development drainage area). These sub-regional or regional areas may be the combination of each planned villages as presented in overlay sheet(s), and described in the project water quality technical report and drainage concept report.
4. Evaluate changes in hydrologic impacts created by the post-development (with project SUSMP and RSWMP) by drainage areas tributary to SCR not by acreages of the planned villages. Note that the acreages of the two land-use scenarios that were used in the NRSP hydrologic modeling may change (under post-development condition) because the planned villages may be developed around the top, ridges and slope of those canyons.
5. Perform hydrologic models on post-construction conditions with additional scenarios:
 - a. Future condition using existing (traditional) design codes or principles where post development flow and volumes are affected.
 - b. Future condition using applicable principles of Low Impact Development (LID) to the maximum extent practicable (MEP) from Scenario a.
 - c. Future condition with the project-level SUSMP and regional solution already identified and included with project design features (PDFs) to achieve the reduction of the increase in runoff volume.
6. Implement storm water better site design criteria to reduce the post-development impacts, such as:
 - a. Reduce residential street widths from the standard practice of 36 feet to 26 feet.



- b. Revisit open space ordinances. To implement Tier 1 and Tier 2, retain as much open space as possible in a natural condition and explore reliable methods and management of maintenance within the community.
- c. Provide for vegetated open channel or dry swales at street right-of-way.
- d. Evaluate alternatives for minimizing the parking demand ratios for large retailers, convenience stores, and single-family homes.
- e. Reduce overall imperviousness in parking lots and amend parking lot codes to require fixed percentage to the maximum extent practicable of all parking lots for compact cars.
- f. Design to redirect rooftop runoff to pervious areas to the maximum extent practicable.

In addition, support of the RSWMP, does not alter Newhall Land Project's obligations to obtain other necessary permits including, but not limited to, permits required under Clean Water Act Sections 404 and 401 for each project that will be implemented through the RSWMP. The Los Angeles Regional Board will issue a 401 Water Quality Certification or Waste Discharge Requirements as appropriate for each project.

If you have any questions, please call Dr. Xavier Swamikannu at (213) 620-2094 or Carlos D. Santos at (213) 620-2093.

Sincerely,

Original Signed

Tracy Egoscue
Executive Officer

cc: Michael Levy, Office of the Chief Counsel, SWRCB
Bruce Fujimoto, Division of Water Quality, SWRCB
Sam Unger, Los Angeles Water Board
Valerie Carrillo, Los Angeles Water Board
Mark Pestrella, DPW Los Angeles County, CA
Eric Strecker, Geosyntec Consultants, Los Angeles, CA
Lisa Austin, Geosyntec Consultants, Los Angeles, CA
Mark Subbotin, Newhall Land, Valencia, CA



California Regional Water Quality Control Board

Los Angeles Region



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Arnold Schwarzenegger
Governor

January 22, 2007

Mr. Daniel Fierros
County of Los Angeles
Department of Regional Planning
Impact Analysis Section, Room 1348
320 West Temple Street
Los Angeles, CA, 90012

COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LANDMARK VILLAGE PROJECT, COUNTY PROJECT NO. 00-196, SCH NO. 2004021002

Dear Mr. Fierros:

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Landmark Village project.

The Landmark Village project site is located in unincorporated Los Angeles County, within the Santa Clarita Valley, and within the Santa Clara River watershed. The Landmark Village project site lies within the jurisdiction of the Los Angeles Regional Water Quality Control Board (Regional Board). The Regional Board is charged with protecting the surface and groundwater quality in the Santa Clara River watershed. Please address the following comments on the water quality section (Chapter 4.3) of the DEIR:

- The DEIR discusses the environmental impacts of urban runoff from the Landmark Village project site; however the impacts of wastewater (from the quality and quantity perspective), generated by residential and commercial uses, were not addressed. Reach 5 of the Santa Clara River is listed on the 2002 Clean Water Act (CWA) Section 303(d) List for chloride, coliform, and nitrate-nitrogen plus nitrite-nitrogen, and is on the proposed 2006 CWA Section 303(d) List for chloride and coliform. Wastewater discharges from the Los Angeles County Sanitation Districts' Saugus and Valencia Water Reclamation Plants have been identified as the primary source of chloride in the Santa Clara River by the Upper Santa Clara River (USCR) Chloride TMDL. Similarly, wastewater generated from the Landmark Village project site may have a potentially significant impact on the Santa Clara River if the treated wastewater is discharged to the USCR. Regional Board staff believes that the impacts of wastewater discharges, generated by the Landmark Village project, to the upper Santa Clara

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River should be addressed by the DEIR. If the impacts of wastewater have been discussed in other documents, the DEIR should reference those documents.

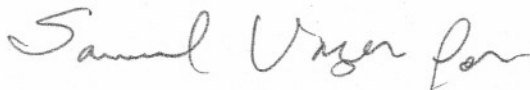
- The DEIR should include a detailed impact analysis of urban pesticides. The DEIR presents very limited pesticide monitoring data. The current Landmark Village project site is largely open space with limited agricultural use and thereby limited pesticide applications. Urban pesticide applications that would be expected as part of the proposed project are likely to have greater pesticide applications at the site than current practice. Detailed information on pesticides monitoring and impact analysis is necessary to quantify the impacts of pesticides application.
- The potential impacts of actively used urban pesticides is not sufficiently discussed in the DEIR. The DEIR discusses mainly on chlorpyrifos and diazinon. Chlorpyrifos and diazinon have been banned by the USEPA for most urban applications, although some public health uses such as fire ant eradication and mosquito control have been continued; however, other active pesticides that are allowed for urban applications may have potentially significant impacts. In addition to discussing the impacts from the allowable uses of chlorpyrifos and diazinon, please discuss impacts from other pesticides that may be utilized in these areas.
- The DEIR should more adequately discuss the incremental steps needed to significantly reduce the project's stormwater runoff and accomplish the hydrologic goals (i.e., site drainage) of the project. As presented, the annual volume of stormwater runoff from the site will increase from 183 acre-feet per year to 331 acre-feet per year; this is an 81 percent increase in annual stormwater runoff. Increased stormwater runoff not only contributes more pollutants, but can cause significant hydromodification downstream which can cause further water quality impacts and habitat loss. Reduction of stormwater runoff may primarily be achieved through best management practices (BMPs) such as an increase in open spaces, and an increase in drainage flow pathway within the project area.
- The DEIR should describe the process of how the required principles of development will achieve the hydrologic goals through use of special exceptions, zoning or subdivision ordinances. Essentially, most development projects currently planned do not incorporate Low Impact Development (LID) strategies on site planning because these LID techniques require special exceptions and/or ordinances. Primarily, the LID approach is a site drainage approach designed to mimic the natural drainage prior to development.
- The DEIR should describe the procedures the developer will follow to achieve special exceptions (or code modifications) for zoning and subdivision ordinances to better protect the area's water resources. Model development techniques include: shorter or narrower streets, fewer and smaller cul-de-sacs, smaller parking lots, permeable pavement, increased storm

water BMPs, more community open spaces, flexible sidewalk standards, increased vegetated buffers and other similar measures.

- The DEIR should discuss in the development site-preparation plan and/or negative impact declaration, the 750-acre off-site grading area. In unusual circumstances or complex excavation and grading operations, the off-site grading may impact (extent of the pre- and post-grading operations) water quality and quantity of the project area due to clearing and grubbing, construction of access roads, by-passes, and controls and protection of existing natural drainages and slope stabilization.
- The DEIR should discuss cumulative impacts from hydromodification of the Landmark Village project in relationship to other projects in the Santa Clara River watershed. The total miles of hydromodification from all the projects of the Specific Plan need to be assessed. Each hydromodification shall be subject to 401 certification requirements.

If you have any questions, please contact Regional Board staff Dr. Yanjie Chu at (213) 576-6681 or Carlos D. Santos at (213) 620-2093.

Sincerely,



Deborah J. Smith
Chief Deputy Executive Officer



California Regional Water Quality Control Board

Los Angeles Region



Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Linda S. Adams
Agency Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger
Governor

May 20, 2008

Dean O. Efstathiou, Acting Director
Diego Cadena, Deputy Director
Department of Public Works
County of Los Angeles
700 South Fremont Avenue
Alhambra, California 91803

REVIEW OF NEWHALL RANCH SPECIFIC PLAN SUBREGIONAL STORMWATER MITIGATION PLAN, APRIL 2008

Dear Mr. Efstathiou and Mr. Cadena:

We have reviewed the Newhall Ranch Specific Plan (NRSP) Sub-Regional Storm Water Mitigation Plan (RSWMP), of April 18, 2008. The Los Angeles Water Board staff also previously reviewed the NRSP RSWMP (August 16, 2006), and determined that the plans contained in the report adequately covered the requirements of Part 4 Section D.9 of the Los Angeles County Municipal Separate Storm Sewer System Permit.

Our letter of November 26, 2007, indicated that the NRSP RSWMP is considered the Tier 1 of the three-tiered approach to RSWMP for the Newhall Ranch's 11,999-acre mixed-use development. The Tier 1 report (i.e., NRSP RSWMP) does not require approval from the Water Board's Executive Officer. The two addenda (i.e., water quality technical report and drainage concept report) in the Environmental Impact Report (in the Tier 2) are the reports subject to approval of the Water Board Executive Officer.

Please note that as Newhall Land proceeds with the development of the five villages, water quality technical reports and drainage concept reports for each or combination of the five villages need to be prepared. The two addenda should describe comprehensively the storm water management site plans (including operation and maintenance) for development activities. These plans should contain adequate technical information and analysis to allow the reviewing agency to determine whether the project meets the regulatory requirements.

If you have any questions, please call Dr. Xavier Swamikannu at (213) 620-2094 or Carlos D. Santos at (213) 620-2093.

Sincerely,

Original Signed
Tracy J. Egoscue
Executive Officer

cc: See next page

California Environmental Protection Agency



Recycled Paper

Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

cc: Michael Levy, Office of the Chief Counsel, State Water Board
Bruce Fujimoto, Division of Water Quality, State Water Board
Sam Unger, Los Angeles Water Board
Mark Pestrella, DPW Los Angeles County, CA
Mark Subbotin, Newhall Land, Valencia, CA
Eric Strecker, Geosyntec Consultants, Los Angeles, CA
Lisa Austin, Geosyntec Consultants, Los Angeles, CA





California Regional Water Quality Control Board

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Technical Advisory

CEQA and Low Impact Development Stormwater Design: Preserving Stormwater Quality and Stream Integrity Through California Environmental Quality Act (CEQA) Review

This technical advisory is one in a series of advisories provided by the Governor's Office of Planning and Research (OPR) as a service to land use officials, professional planners and CEQA practitioners. OPR provides technical guidance from time to time on issues that broadly affect the practice of CEQA and land use planning.

Low Impact Development stormwater design (LID) is being widely promoted and applied at the federal, state and local levels as a technique to address impacts of land development on surface water quality and hydrology. This technical advisory provides general information about LID and guidance to CEQA lead agencies regarding the incorporation of water-quality control measures—including LID—as a potential CEQA mitigation strategy early in project design and review. A list of selected references is provided at the end of this technical advisory for readers who would like more information about LID and how it has been implemented.

THE ISSUE

The impacts of urban development on streams, lakes, estuaries, and the ocean are well documented through recent research and study, both nationally and at the state level. Surface runoff from developed areas is a leading source of non-point source water pollution in California. As roofs and pavement cover natural landscapes, rain and snowmelt no longer soak into the ground. Instead, storm drains carry large amounts of runoff directly to streams and other water bodies. Increased flow may cause stream beds and banks to erode, damaging or eliminating stream habitat and carrying

AUGUST 5, 2009

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sediment downstream. Runoff from roofs and pavement also flushes sediment, oil, grease, pesticides, nutrients, bacteria, trash, and heavy metals into streams, lakes, estuaries, and the ocean. Projects that replace previously undeveloped land with new impervious surfaces, or redevelopment that increases impervious surfaces, may contribute to such water quality impacts individually and cumulatively with other development.

LID AS A RESPONSE

LID is a stormwater management strategy aimed at maintaining or restoring the natural hydrologic functions of a site to achieve natural resource protection objectives and fulfill environmental regulatory requirements. LID employs a variety of natural and built features to reduce the rate of surface water runoff, filter pollutants out of runoff, and facilitate infiltration of water into the ground.

Typical LID measures include using pervious pavements and green roofs, dispersing runoff to landscaped areas, and routing runoff to rain gardens, cisterns, swales, and other small-scale facilities distributed throughout a site. Interference with natural watershed functions can be minimized and impacts on groundwater recharge, surface water quality, and flood hazards can thereby be reduced through appropriate implementation at development sites. As explained in greater detail below, LID measures are most effective when incorporated into a project design during initial site layout and configuration.

Recognizing the water quality benefits of advanced site planning, state agencies such as the Department of Transportation (Caltrans), the Department of Water Resources (DWR), the State Water Resources Control Board (SWRCB), the Building Standards Commission and the Ocean Protection Council (OPC), among others, support the use of LID. Local government organizations such as the Local Government Commission (LGC) promote the use of LID through its Ahwahnee Water Principles for Resource Efficient Land Use. The Institute for Local Government (ILG) also makes information available on this issue through its California Climate Action Network Best Practices Framework.

Water Quality Laws and Regulations

State and federal laws and regulations increasingly recognize the value of LID in stormwater management and project design. Following amendments to the Federal Clean Water Act in 1987, municipal separate storm sewer systems (MS4s) were brought under the National Pollutant Discharge Elimination System (NPDES) permitting program. Acting under NPDES permits, many municipalities now require, as a condition of development project approvals, measures to address stormwater pollutants and to control the rate and durations of stormwater discharges.

The Clean Water Act and California Water Code mandate controls on stormwater runoff from urban and developing areas served by storm drain systems. California's Regional Water Quality Control Boards implement this mandate by issuing NPDES permits and discharge requirements to dischargers such as municipalities, to Caltrans, and to operators of construction sites and industrial facilities.

Municipal NPDES permits are reissued on a 5-year cycle and require implementation of a comprehensive municipal stormwater pollution prevention program (also known as Storm Water Management Program or SWMP). These programs include, among other requirements:

- Conducting public education and outreach on stormwater impacts.
- Detecting and eliminating non-stormwater discharges to storm drains.
- Reducing pollution from maintaining public buildings, parks, open space, municipal storm drains, and municipal fleets.
- Requiring erosion and sediment controls, and controls on wastes, at construction sites.
- Developing, implementing, and enforcing a program to address post-construction stormwater runoff discharges from newly developed and redeveloped areas, including incorporation of permanent Best Management Practices (BMPs) in public and private development projects.

Many municipal NPDES permits also require water-quality monitoring of local water bodies and targeted efforts to reduce specific pollutants.

For development projects, required BMPs typically include control of on-site pollutant sources, treatment to remove pollutants from runoff prior to discharge, and control of the rate and duration of runoff discharges from the site. Increasingly, NPDES permits are beginning to favor or require the use of LID to achieve these objectives. However, communication between those who plan and those who permit a project is critical if water quality and hydrologic control measures like LID are to be successfully incorporated into a project design. Too often, an applicant completes its project design before learning that NPDES and other permit conditions necessitate a modification of the project design. This lack of coordination can result in lost time, increased project costs, and misunderstandings between applicants and permit agencies.

LID AS A CEQA MITIGATION TOOL

CEQA requires public agencies to make a good faith, reasoned effort, based upon available information, to identify the potentially significant direct and indirect environmental impacts—including cumulative impacts—of a proposed project or activity. In addition, CEQA obligates public agencies to consider less environmentally damaging alternatives and adopt feasible mitigation measures to reduce or avoid a

project's significant impacts. The CEQA process is intended to inform the public of the potential environmental effects of proposed government decisions and to encourage informed decision-making by public agencies.

A key benefit of the CEQA review process is that project impacts can be identified early, responsible agencies consulted, and feasible mitigation measures identified to avoid or reduce the impacts. The CEQA process is intended to be a communication tool to avoid the surprises that an applicant might face when reaching the project permitting stage, which takes place after project design and CEQA review.

Compliance with CEQA entails three basic steps, which are discussed below in the context of water quality and hydrology:

- Identify changes to water quality and hydrology resulting from the proposed project.
- Assess the significance of the impacts caused by the proposed project.
- If the impacts are found to be significant, identify feasible alternatives and/or feasible mitigation measures that will reduce the project's impact below significance.

Identify Changes to Water Quality and Hydrology

Potential surface water quality impacts of a development are closely related to existing site conditions, the amount of impervious area added, and the sensitivity of the receiving water. Sections 15063(d)(2), 15124 and 15125 of the CEQA Guidelines require a description of the project's existing setting. Further, several questions in the Appendix G Environmental Checklist Form ask whether the proposed project would alter existing drainage patterns such that amount or rate of runoff may cause erosion or flooding. (CEQA Guidelines, Appendix G, VIII(b)-(e).) The following are just some examples of site conditions that should be considered when identifying the potential adverse water quality effects of a proposed project.

- **Existing Soil Types, Slopes, and Vegetation.** These factors help determine how much runoff could increase after roofs and paving are added. Undeveloped sites that are flat, forested or have sandy soils generally produce less runoff than undeveloped sites with steep slopes, clay soils, or sparse vegetation.
- **Imperviousness.** Imperviousness can be a useful indicator linking urban land development to the degradation of aquatic ecosystems and it can be quantified, managed, and controlled during land development. At the site scale, imperviousness can be a reasonable proxy for loadings of runoff pollutants. In other words, an increase in imperviousness can indicate the degree of potential changes in hydrology. Evaluation of potential hydrologic

or water-quality impacts should, therefore, include an estimate of impervious area before and after the project is built. Estimates should be consistent with preliminary or conceptual site plans available at the time of review. For projects with more than one runoff discharge point—particularly where a project encompasses, or discharges to, more than one stream or waterway—these estimates should be broken down by watershed in order to accurately evaluate potential impacts to each potentially affected resource.

- **Receiving Water Bodies.** If project-related runoff will not be contained on-site, the receiving water body, such as streams (including ephemeral streams or drainageways), wetlands, or other waters of the state, should be identified. If a project will drain to an existing storm drain system, such as a private or municipal storm drain, the water body ultimately receiving the site's discharge should be noted. The existing quality of the receiving water body should also be known in order to assess the potential impact of the project's runoff. If the project discharges to an existing storm drain system, hydrologic impacts may be less of a concern; however, LID may still protect water quality.

Assess the Significance of Impacts

Although the CEQA Guidelines, at Appendix G, provide a checklist of suggested issues that should be addressed in an environmental document, neither the CEQA statute nor the CEQA guidelines prescribe thresholds of significance or particular methodologies for performing an impact analysis. This is left to lead agency judgment and discretion, based on factual data and guidance from regulatory agencies and other sources where available and applicable. A threshold of significance is a standard or set of criteria that represent the level above which a lead agency finds a particular environmental effect of a project to be significant. (State CEQA Guidelines, § 15064.7.)

Lead agencies are encouraged, but not required, to adopt thresholds of significance for environmental impacts. A lead agency may also consider a project's compliance with a regulatory standard (for example, an air quality or water quality standard) to determine whether a project may have a significant impact on the environment, either individually or cumulatively. (See, e.g., State CEQA Guidelines, § 15064(h)(3).) An environmental document must, however, include sufficient information to support a conclusion that compliance with existing regulatory standards will reduce a project's impacts to a less than significant level. (State CEQA Guidelines, §§ 15063, 15151.)

Stormwater NPDES permit design standards and other water quality requirements may, therefore, be a good place to start in evaluating whether a project may have a significant effect on water quality and hydrology. Municipal stormwater NPDES permits may include criteria for determining whether LID or other controls

must be incorporated into a project. A lead agency may also evaluate a project's consistency with provisions of the applicable Water Quality Control Plan (Basin Plan), which NPDES permits are intended to implement. Criteria in the appropriate local stormwater ordinance, drainage ordinance, or other ordinance may also be used if appropriate. As explained in greater detail below, however, this information must also be accompanied by specific information about the proposed project.

Identify Alternatives and Mitigation Measures

Mitigation of a project's water quality and hydrologic impacts may comprise:

- Application of source control measures to prevent pollutants from specific facilities or activities from entering runoff. Examples of such measures include covering wastes and other materials so they are not exposed to rain.
- Treatment of runoff prior to discharge from the site.
- Control of runoff rates and durations to mimic pre-project hydrology.

LID is increasingly used to achieve runoff treatment and flow-control. Some NPDES permits require LID be employed solely or in combination with other treatment and flow-control methods. LID features detain, treat and infiltrate runoff by minimizing impervious area, using pervious pavements and green roofs, dispersing runoff to landscaped areas, and routing runoff to rain gardens, cisterns, swales, and other small-scale facilities distributed throughout a site.

In practice, each project must be evaluated on a case by case basis, but common LID measures that can be implemented on a development site include:

- **Make Sensitive Choices in Site Layout.** Identify the most sensitive natural areas and, where possible, leave them undeveloped. To the extent possible, set back development from creeks, wetlands, and riparian habitats. Preserve significant trees. Conform the site along natural land forms, avoid excessive grading and disturbance of vegetation and soils, and mimic the site's natural drainage patterns. Where possible, concentrate development on portions of the site with less permeable soils, and preserve areas that can promote infiltration. To the extent possible, limit overall coverage of paving and roofs by designing compact structures, narrower and shorter streets and sidewalks, smaller parking lots, and indoor or underground parking. Where possible, detain and retain runoff throughout the site. Use drainage design elements such as depressed landscape areas, vegetated buffers, and bioretention facilities (consisting of a shallow surface reservoir, a layer of imported planting medium, and a gravel underlayer with perforated pipe underdrains) as amenities and focal points within the site and landscape design.

- **Use Pervious Surfaces.** In new buildings and major retrofits, evaluate the technical and economic feasibility of green roofs. Identify where permeable pavements, such as crushed aggregate, turf block, unit pavers, pervious concrete, or pervious asphalt could be substituted for impervious concrete or asphalt paving.
- **Disperse Runoff to Adjacent Pervious Areas.** Where possible, direct roof downspouts across pervious areas. A maximum 2:1 ratio between impervious and pervious surfaces is recommended. Receiving pervious areas should be relatively flat, and soils should be amended as needed to promote infiltration. Similarly, parking areas should be designed so that runoff can sheet flow to landscaped areas. Where feasible, use curb cuts or no curbs to allow runoff to flow to vegetated areas.
- **Direct runoff to bioretention facilities, flow-through planters, dry wells, or cisterns.** On densely developed sites, and where runoff from impervious roofs and paved areas cannot be dispersed to landscaping, consider directing runoff to facilities designed to detain and treat runoff before letting it seep away slowly. Dry wells or infiltration basins may be used if soils are sufficiently permeable and geotechnical considerations allow. Bioretention facilities can be a suitable option for many sites.

Some municipalities provide guidance to applicants for designing LID features to comply with criteria in the locally applicable NPDES permit, and some require submittal of an LID design that is certified by an architect, landscaped architect, or engineer. Lead agencies and project applicants can benefit from considering LID early in the project planning and design, and prior to completion of a draft CEQA document, in order to avoid significant water quality and hydrologic impacts and to be proactive in meeting anticipated permit requirements.

Design Detail for CEQA Review

To be most practicable and effective, the size and location of LID features must be planned during initial layout and configuration of the project. Effective mitigation of water-quality impacts often requires careful coordination of LID features with the location of buildings, traffic circulation, landscaping, aesthetics, and other features subject to CEQA review. For example, it may be very difficult to revise an approved site plan to re-route drainage from on-site parking and circulation areas to landscaped areas for dispersal, infiltration, and treatment. Lead agencies and developers can avoid this type of design challenge by incorporating LID into the initial site planning and landscape design.

While CEQA allows lead agencies to identify performance standards that will govern the development of specific mitigation measures, sufficient information must

be provided in order to evaluate whether the project as designed can achieve the identified standard. Further, CEQA requires that environmental documents contain a greater degree of specificity for construction projects than for planning-level decisions. (State CEQA Guidelines, § 15146.) Depending on the project, therefore, a conceptual LID design or a preliminary design of LID facilities may be needed to meet CEQA's requirement that mitigation measures are feasible and enforceable, and that they are not deferred. Sufficient information regarding LID and other water quality protection measures is also required to ensure any potential adverse effects resulting from such measures are discussed. (State CEQA Guidelines, § 15126.4.)

LAND USE POLICIES TO SUPPORT LID

Analysis and mitigation of project-specific impacts—as accomplished through CEQA review and the implementation of NPDES permit requirements for development review—can be more effective if those efforts are supported and supplemented by watershed-scale plans and policies. Implementing LID at the site or project scale can complement plans and programs at the watershed scale.

Sustainable Development Policies

General plans and local policies that encourage redevelopment, infill, and compact, mixed-use, transit-oriented development reduce the amount of impervious area needed for buildings and streets. As described in Chapter 2 of the OPR *General Plan Guidelines*¹, these sustainable development policies have the additional benefits of protecting open space and working landscapes, protecting environmentally sensitive lands, creating strong local and regional economies, promoting energy and resource efficiencies, and promoting equitable development.

Experience has shown LID stormwater design can be successfully integrated into higher-density urban developments. It preserves some natural hydrologic functions and can also reduce heat island effects, improve air quality, and improve the livability of urban spaces. LID can therefore be a complementary means of promoting many environmental and land use objectives of a local community.

Stream Corridor Planning

Integrated planning for stream corridors can help protect life and property against flood damages, improve opportunities for active and passive recreation, and preserve and enhance stream and riparian habitats.

Streams can be damaged by disruptions to their flow regime (for example, increased volume or velocity of runoff from increased impervious areas) and by disruptions in sediment supply. For some coastal streams, preservation of the upper watershed—and connectivity of the upper and lower watersheds so that coarse

1 *General Plan Guidelines*, Governor's Office of Planning and Research, 2003.

sediments are transported downstream—are essential to maintaining sediment balance and preventing downcutting and erosion. In other streams, an excess of sediment from upstream agricultural areas contributes to poor water quality and stream habitat quality in downstream, urbanized areas. Therefore, management of upstream sediment sources is an important consideration when applying LID on development sites within an urban area.

Consistent with the discussion of the Conservation Element in Chapter 4 of the OPR *General Plan Guidelines*, general plans should integrate, coordinate, and align land use planning with local plans and policies to preserve and enhance floodplains and riparian corridors, including floodplain management policies and ordinances, storm drain master plans, and plans for parks, open space, and recreational uses within streamside areas. General plans should also carefully coordinate land use planning and policies with state and Federal agencies' plans to address pollutant issues and habitat needs within streams and riparian areas. These plans may include Habitat Conservation Plans/Natural Community Conservation Plans and amendments to Water Quality Control Plans (Basin Plan Amendments) that the Regional Water Quality Control Boards may adopt to implement Total Maximum Daily Load processes (TMDLs). Applying LID on development sites, and promoting the retrofit of existing urban drainage systems with LID, can be part of a lead agency's integrated approach to protecting and enhancing stream corridors.

SELECTED RESOURCES

Further Information and Background About Low Impact Development

- California Ocean Protection Council (2008). Resolution Regarding Low Impact Development. http://www.opc.ca.gov/webmaster/ftp/pdf/docs/Documents_Page/Resolutions/LID%20resolution.pdf
- Geosyntec Consultants (2008). Evaluation of Post-Construction Hydromodification Requirements Contained in the Preliminary Draft General Construction Permit. http://www.swrcb.ca.gov/water_issues/programs/stormwater/docs/constpermits/comments/cbia_hydromod.pdf
- Low Impact Development Center: <http://www.lowimpactdevelopment.org/>
- Prince George's County, Maryland (1999). *Low Impact Development Design Strategies: An Integrated Design Approach*. Department of Environmental Resources, Programs and Planning Division. 150 pp. <http://www.epa.gov/nps/lidnatl.pdf>
- State Water Resources Control Board (2007). California LID Policy Review. http://www.waterboards.ca.gov/water_issues/programs/low_impact_development/
- USEPA Low Impact Development webpage: <http://www.epa.gov/owow/nps/lid/>
- USEPA (2003). *Protecting Water Quality from Urban Runoff*. Fact Sheet, 2 pp. http://www.epa.gov/owow/nps/toolbox/other/epa_nps_urban_facts.pdf
- USEPA (2007). *Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices*. EPA 841-F-07-006. <http://www.epa.gov/owow/nps/lid/costs07/>

Practical Guidance for Designing Development Sites with LID

- Bay Area Stormwater Management Agencies Association (1999). *Start at the Source: Design Guidance Manual for Stormwater Quality Protection*. http://www.cleanwaterprogram.org/uploads/SAS_Manual_index.pdf
- California Asphalt Pavement Association (resources for porous asphalt pavements): <http://www.californiapavements.org/stormwater.html>
- Concrete Promotion Council of Northern California (resources for permeable concrete pavements): www.concreteresources.net.
- Contra Costa Clean Water Program (2008). *Stormwater C.3 Guidebook: Stormwater Quality Requirements for Development Applications*. 4th Edition. <http://www.cccleanwater.org/c3-guidebook.html>

- Ferguson, Bruce K. (2005). *Porous Pavements*. ISBN 0-8493-2670-2.
- Marin County Stormwater Pollution Prevention Program (2008). *Guidance for Applicants: Stormwater Quality Manual for Development Projects in Marin County. A Low Impact Development Approach*. http://mcstoppp.org/acrobat/GuidanceforApplicantsv_2-5-08.pdf
- Prince George's County, Maryland. *Bioretention Manual*. Department of Environmental Resources, Programs and Planning Division. http://www.princegeorgescountymd.gov/Government/AgencyIndex/DER/ESG/Bioretention/pdf/Bioretention%20Manual_2009%20Version.pdf
- Puget Sound Action Team (2005). *Low Impact Development Manual for Puget Sound*. http://www.psparchives.com/publications/our_work/stormwater/lid/LID_manual2005.pdf
- San Diego County (2007). *Low Impact Development Handbook: Stormwater Management Strategies*. <http://www.sdcountry.ca.gov/dplu/docs/LID-Handbook.pdf>
- Schueler, Tom. 1995. *Site Planning for Urban Stream Protection*. Environmental Land Planning Series. Metropolitan Washington Council of Governments. 232 pp.

Information and Examples for Watershed Management and Stream Corridor Planning

- Center for Watershed Protection. 2002. Watershed Vulnerability Analysis. http://www.cwp.org/Resource_Library/Center_Docs/USRM/Vulnerability_Analysis.pdf
- Federal Interagency Stream Restoration Working Group. 1998. *Stream Restoration: Principles, Processes, and Practices*. http://www.nrcs.usda.gov/technical/stream_restoration/newgra.html
- Natural Resources Conservation Service. 2007. *Stream Restoration Design*. Part 654, National Engineering Handbook. <http://www.nrcs.usda.gov/technical/eng/stream-docs.html>
- Santa Clara Basin Watershed Management Initiative (2003) *Watershed Action Plan*. http://www.valleywater.org/_wmi/Actiondraft0803.htm
- Surfrider Foundation, Ventura County Chapter (2008): *Solving the Urban Runoff Problem: A Vision for the Urban Watershed, Ventura, California*. <http://www.surfrider.org/Ventura/reports/Solving%20the%20Urban%20Runoff%20Problem%20-%20Ventura.pdf> See also the *City of Ventura General Plan*. http://www.cityofventura.net/vision/general_plan, and the Local Government Commission's Watershed-Based Strategy for Ventura County Communities, <http://water.lgc.org/ventura>.
- The River Project (Los Angeles Basin): <http://www.riverproject.org>



August 4, 2010

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Subject: Comments on Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan Final EIS/EIR

Dear Mr. Allen,

The State Coastal Conservancy's Santa Clara River Parkway project is located in Ventura County, downstream of and partially contiguous to Newhall Land and Farming ownerships. The Parkway project is a publicly funded effort that involves the acquisition and restoration of the river for habitat, flood management and recreational trails. We and our grantees, The Nature Conservancy and the Friends of the Santa Clara River, have acquired 14 miles of the river and 3,000 acres thus far. The State of California has invested approximately \$15 million in the project and federal expenditures to assist us in our acquisition efforts amount to another \$5 million. Our project involves the acquisition of continuous ownership from willing sellers from the mouth of the river upstream to the Newhall boundary.

The downstream location of the Parkway lands along the Santa Clara River makes them particularly susceptible to various indirect and cumulative impacts that would be created by the proposed Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (proposed Newhall Ranch Project) along the river in Santa Clarita Valley (Los Angeles County). We request that the U.S. Army Corps of Engineers (ACOE) carefully consider potential project impacts and suitable avoidance and mitigation as part of its Public Interest Review process (as discussed under 33 CFR Part 320).

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Inadequate Exploration of Avoidance in Alternatives Analysis

The alternative analysis in the Final EIS/EIR is an improvement over that discussed in the Draft EIS/EIR, particularly the inclusion of the Draft Least Environmentally Damaging Practicable Alternative (LEDPA). However, there is still inadequate exploration of practicable avoidance measures in the alternatives considered. We strongly recommend that the Final LEDPA include additional measures to avoid impacts. In particular, avoidance of the proposed creek and wetland fill in Potrero Canyon and avoidance of the 100-year floodplain (as in Alternative 7) would result in sizable reductions of significant impacts to jurisdictional waters and wetlands and biological, hydrogeomorphic, and water quality resources and functions, while still allowing a reasonable level of development that would meet the overall Project Purpose.

Inadequacy of Proposed Compensatory Mitigation

Given the significant resource values associated with the Santa Clara River and its floodplain, and the uncertainties associated with analysis of impacts and effectiveness of proposed mitigation measures, we feel that the level of compensatory mitigation currently proposed is inadequate. There is also uncertainty introduced by the proposed timing or phasing of certain mitigation measures – this makes it difficult to determine when, or even if, the desired level of value and functional equivalency in habitat and other resource conditions and processes will be obtained. Additional compensatory mitigation should be required at the very beginning of the project to help ensure that lost resource functions and values are adequately mitigated throughout the life of the Project. Even assuming the proposed Newhall Ranch Project design is modified to reduce impacts through increased avoidance and other measures, it is recommended that additional compensatory mitigation lands be dedicated or conservation easements acquired within the 500-year floodplain of the Santa Clara River downstream of the Project and permanently managed for public conservation purposes. This would help ensure that Project downstream impacts on hydrology and sediment transport, riparian habitats, and river- and riparian-dependent species would be adequately addressed and that costs of unmitigated Project impacts are not borne by downstream landowners (both public and private) and the taxpayers of Ventura County. Additional compensatory mitigation is required to protect the public interest in the resources and values of the Santa Clara River and its floodplain downstream of the proposed Project site.

Potential for Downstream Effects Related to Hydromodification and Water Quality

Because of the potential for the proposed Newhall Ranch Project to create downstream impacts on stream hydrology and water quality, the Coastal Conservancy is very concerned about the inadequacy of the Sub-Regional and Village-Scale Water Quality Mitigation Plans prepared as part of the EIS/EIR process and the findings agencies have been making on that basis. Table 4.4-15 of the Final FEIS/EIR showed an increase in the estimated average annual storm water runoff volumes from the existing to proposed condition by 2.5 times (existing conditions 1,302 acre-foot to 3,356 acre-foot with developed PDFs). This increase in average annual volume and its mitigation is not adequately discussed thru the five village-scale levels. For example, it was only assumed

through reference to the International Stormwater BMP Database that there would be 20 percent reduction in stormwater runoff.

Given the importance of this issue, we would like to see more explicit analysis, including quantitative modeling of such effects at the village-scale, of likely impacts of the proposed Newhall Ranch Project on water quality and modification of hydrology in the Santa Clara River. Even with more sophisticated analysis there will be uncertainty about the potential for downstream impacts. Given such uncertainty, the Coastal Conservancy strongly recommends that additional mitigation be required downstream, such as conservation easements or acquisition of parcels dedicated to conservation within the 100-year floodplain of the Santa Clara River between the proposed Newhall Ranch Project and the confluence of the river with Sespe Creek.

Uncertainty Regarding Project Impacts on Sediment Loading and Beach Replenishment

The Coastal Conservancy shares the concern previously raised by the Regional Board (comment letter 011-RWQCB dated August 25, 2009) regarding the uncertainty over potential Project impacts on sediment loading and beach replenishment. The analysis used in the EIS/EIR relies on a single sediment yield value derived from a huge contributing area in the larger watershed, which is then applied to estimate sediment yield at a much finer, local scale to assess potential Project impacts. Such an approach is inherently flawed. Geomorphic analyses conducted in the lower Santa Clara River watershed indicate that the local-scale interaction between geology, land use, and slope is important in driving sediment yield. The combination of these three variables in the lower watershed results in a local sediment yield that varies by 2 orders of magnitude. Therefore, choosing the wrong 'representative' sediment yield can cause serious miscalculations (either over- or under-estimation) in tributary sediment yield. Given this uncertainty, it is not possible to determine the likely effects of the proposed Project on sediment yield and subsequent beach replenishment using the analysis presented in the Final EIS/EIR. In consideration of this uncertainty, we recommend that a more detailed monitoring and mitigation plan be required to ensure that Project impacts on sediment loading and beach replenishment can be adequately assessed and appropriate mitigations imposed.

In addition to the above comments on the EIS/EIR, we have the following comments with reference to the Corps of Engineers regulations and EPA's 404(b)(1) Guidelines.

Corps Regulations

33 CFR 320.4(a)(3): "full consideration and appropriate weight will be given to all comments, including those of federal, state, and local agencies, and other experts on matters within their expertise." The State Coastal Conservancy's Santa Clara River Parkway project should be given full consideration as part of your Public Interest Review.

33 CFR 320.4(b)(4): no permit shall be issued unless the public interest review demonstrates that the benefits of the alteration outweigh the damage to wetlands.

Requires application of 404(b)(1) Guidelines. We contend that the Corps has not demonstrated that the benefits outweigh the manifest damage to wetlands.

33 CFR 320.4(g)(2): if the protective structure may cause damage to the property of others, adversely affect public health and safety, adversely impact floodplain or wetland values, or otherwise appears contrary to the public interest, the district engineer will so advise the applicant and inform him of possible alternative methods of protecting his property. The Project could cause damage to downstream property owned by the Nature Conservancy and the Friends of the Santa Clara River.

33 CFR 320.4(l)(2): requires the Corps to ensure that "whenever practicable the natural and beneficial values served by floodplains are restored and preserved." Here, we contend that there are feasible alternatives that would better restore and preserve natural floodplain functions (since the permit would allow elimination of large portions of the 100-year floodplain), and that the Corps has not adopted or adequately considered these alternatives.

33 CFR 320.4(r)(2): requires that "all mitigation will be directly related to the impacts of the proposal, appropriate to the scope and degree of those impacts, and reasonably enforceable." The compensatory mitigation appears to be out-of-kind and the successful re-vegetation of the flood control structures not feasible or enforceable.

404(b)(1) Guidelines

40 CFR 230.10(a): no discharge shall be permitted "if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem..." Practicable alternatives for non-water dependent activities "are presumed to be available, unless clearly demonstrated otherwise." 40 CFR 230.10(a)(3), emphasis added. This is a steep burden which we believe the Corps has not met.

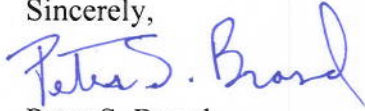
40 CFR 230.10(b)(1): no discharge shall be permitted if it "Causes or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard."

40 CFR 230.10(c)(4): no discharge shall be permitted if it causes or contributes to significant degradation of the waters of the United States through significant adverse effects on "recreational, aesthetic, and economic values." In addition to the adverse effects on recreation and state and local fiscal health, the Project will significantly degrade the aesthetic values of the river completely altering the floodplain from its natural state and its historical ecology.

40 CFR 230.10(d): no discharge shall be permitted "unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem." We contend there are additional practicable steps to minimize

potential adverse impacts, including further avoidance/minimization of the increased runoff rather than relying on future, largely unenforceable BMPs.

Sincerely,

A handwritten signature in blue ink, appearing to read "Peter S. Brand". The signature is fluid and cursive, with the first name "Peter" and last name "Brand" clearly distinguishable.

Peter S. Brand

Senior Project Manager

cc: Eric Raffini, US Environmental Protection Agency
Dennis Bedford, California Department of Fish and Game


F06. Letter from California Regional Water Quality Control Board, Los Angeles Region, dated August 3, 2010

1.0 Introduction

In summary, the comments from the California Regional Water Quality Control Board, Los Angeles Region (Regional Board), focus on the Final EIS/EIR. The Regional Board remains concerned that the proposed Project may result in hydrogeomorphic changes and related impacts to water quality. The comments also state that the Corps and CDFG have not fully considered Regional Board's comments in the development of the Draft LEDPA, including comments concerning hydrogeomorphic impacts to Potrero, San Martinez Grande, and Chiquito Canyons; low-impact development (LID); water quality; compliance with Part 4.D of the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit; bacterial indicators and pathogens; beach replenishment; and sediment management.

The Regional Board states that the Final EIS/EIR and the Clean Water Act section 404(b)(1) alternatives analysis, including the draft Mitigation and Monitoring Plan in Appendix 11.0 of the 404(b)(1) analysis, are inadequate to make a final CEQA determination. The Corps, in coordination with CDFG, has provided additional information in response to the Regional Board's August 3, 2010 comment letter to clarify the Board's outstanding issues and to support the CEQA adequacy of the Final EIS/EIR. The information and analysis provided by the Corps and CDFG further demonstrate that, as concluded in the Final EIS/EIR, other than those incorporated into the final LEDPA, there are no additional feasible alternatives, changes, or alterations, or to the mitigation measures, that would substantially lessen the significant adverse environmental effects of the Project as required by CEQA.

In addition, the Regional Board commented that the Final EIS/EIR and the 404(b)(1) alternatives analysis will be used by the Regional Board to support its review and action upon the final LEDPA as part of its Clean Water Act section 401 Water Quality Certification of the Corps' section 404 Permit. The information provided by the Corps and CDFG also further demonstrates that the discharge of dredged or fill material in conjunction with implementation of the final LEDPA as analyzed in the Final EIS/EIR and draft 404(b)(1) alternatives analysis:

- would not cause or contribute, after consideration of disposal site dilution and dispersion, to a violation of state water quality standards; 
- does not violate any applicable toxic effluent standard or prohibitions adopted under section 307 of the Clean Water Act;
- does not jeopardize the continued existence of species listed as endangered or threatened under the Endangered Species Act or result in the likelihood of the destruction or adverse modification of critical habitat designed thereunder; and
- does not cause or contribute to significant degradation of receiving water quality.

2.0 Response

2.1 Draft LEDPA

The Regional Board commented that the Draft LEDPA identified in the Final EIS/EIR did not indicate that alternative- and drainage-specific design recommendations associated with Alternatives 3, 4, 5 and 6 had been incorporated into the Project to achieve further avoidance and minimization, as identified in its August 25, 2009 comment letter on the Draft EIS/EIR. The Regional Board's August 25, 2009 letter recommended that specific components of Alternatives 3, 4, 5, and 6 be incorporated into the proposed Project (Alternative 2). The Regional Board commented in its most recent letter that, absent the incorporation of those specific components into the Project, Alternative 7 best meets all avoidance and minimization requirements and, therefore, should be designated as the LEDPA. The Regional Board's August 3, 2010 letter did not address the fact that Alternative 7 was determined not to be a practicable alternative by the Corps pursuant to the Final EIS/EIR and the Corps' draft 404(b)(1) alternatives analysis.

Response: The Corps, in coordination with CDFG, has made a preliminary determination that the Draft LEDPA (also identified as Modified Alternative 3) would avoid and minimize adverse impacts to waters of the United States, including wetlands, and would be practicable (taking into consideration cost, existing technology, and logistics) in light of the overall project purpose. (40 C.F.R. § 2030.10(a)(2), § 2030.3(q); and see the Corps' draft 404(b)(1) alternatives analysis, pp. 56-57.)

This response will first summarize the process leading to the Corps' identification of the Draft LEDPA, as described in the Corps' draft 404(b)(1) alternatives analysis. It will then respond specifically to Regional Board's comments.

Process Leading to the Draft LEDPA

The applicant's draft 404(b)(1) alternatives analysis evaluated a series of alternatives on a project-wide scale. The alternatives included the proposed Project (Alternative 2), the other alternatives evaluated in the Draft EIS/EIR for the project (Alternatives 3-7), and an alternative that would completely avoid fill of waters of the United States (Alternative 8). Among these alternatives, the applicant's draft analysis determined that Alternative 3 was the configuration that avoided and minimized impacts to waters of the United States to the maximum extent practicable. This alternative was designated the Initial LEDPA. The applicant then incorporated specific changes to Alternative 3 that were requested by CDFG to address compliance with the California Endangered Species Act (CESA) and the California Fish & Game Code section 1602 streambed alteration program. As part of that process, approximately 73 acres of development and fill of one acre of waters of the United States were eliminated to protect riparian areas and expand preserves for the state-listed San Fernando Valley spineflower. The applicant determined that the revised Alternative 3 continued to be practicable and designated it the Revised Initial LEDPA.

After selecting the Revised Initial LEDPA, the applicant performed a series of "additional studies," focusing on specific areas within the Project footprint. The purpose of these studies was to identify specific changes that could achieve additional avoidance of waters of the United States without rendering the Project impracticable or incapable of meeting the overall project purpose. The additional studies focused on the areas with the greatest impacts and the aquatic resources that exhibited relatively high functions and services, because these areas offer the greatest potential for additional avoidance. The

additional studies also examined whether it was practicable to avoid special aquatic sites (wetlands) that were proposed to be filled under the Revised Initial LEDPA.

Each of the additional studies analyzed "sub-alternatives" -- alternative configurations for the geographic area covered by the study. Some of the sub-alternatives were drawn from Alternatives 3 through 7, while others represented specific suggestions from the Corps or from other resource agencies. Each of the additional studies also included a no-fill sub-alternative for the study area. The boundary of each study area was drawn to include those parts of the land plan that would be affected by further avoidance.

The applicant evaluated each sub-alternative in terms of costs, logistics, consistency with the overall project purpose, and impacts to waters of the United States. For each study area, the applicant identified the sub-alternative that achieved the greatest avoidance of impacts to waters of the United States without incurring unreasonable costs or being incompatible with the overall project purpose. The chosen sub-alternatives then were incorporated into the Project as a whole by modifying the Revised Initial LEDPA. The resulting hybrid configuration was subjected to a comprehensive site-wide analysis to ensure that it remained practicable and capable of meeting the overall project purpose. This hybrid site-wide alternative was termed the Draft LEDPA -- the least environmentally damaging practicable alternative for the Project as a whole.

The Draft LEDPA

The Corps conducted a thorough and independent evaluation of the information provided in the Draft and Final EIS/EIR and the applicant's draft 404(b)(1) alternatives analysis. (See Final EIS/EIR, **Appendix F1.0** [Corps' draft 404(b)(1) alternatives analysis].) Based on that evaluation, the Corps made a preliminary determination that Modified Alternative 3 met the overall project purpose, would be practicable in light of cost, logistics, and technology, and would not result in other significant adverse impacts. Therefore, the Corps made the preliminary determination that Modified Alternative 3 would represent the least environmentally damaging practicable alternative (Draft LEDPA). (*Id.* [Corps' draft 404(b)(1) alternatives analysis, pp. 53-63].)

The Draft LEDPA would substantially avoid and minimize adverse impacts associated with the discharge of fill material in waters of the United States by reducing permanent impacts by 27 acres, when compared to the proposed Project (Alternative 2). Under the Draft LEDPA, two of the three bridges crossing the Santa Clara River and associated bank stabilization would be constructed. However, the Potrero Canyon Road Bridge would not be constructed, further reducing impacts to jurisdictional waters and wetlands in the Santa Clara River and lower Potrero Canyon. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, p. 54].) In addition, two major tributary drainages (Long and Potrero canyons) would be regraded and realigned under the Draft LEDPA; however, the channels would be wider than those of the proposed Project. (*Id.*) In the three other major tributary drainages (Lion, San Martinez Grande, and Chiquito canyons), the Draft LEDPA would incorporate additional areas of preserved jurisdiction with limited channel grading to realign their banks to accommodate adjoining infrastructure and development area. (*Id.*)

The Draft LEDPA also would include additional San Fernando Valley spineflower (spineflower) preserve acreage in the Potrero, San Martinez Grade, Grapevine Mesa, and Airport Mesa preserves, consistent with input received from CDFG, the state agency making the CESA incidental take permit decision with respect to the spineflower. Provided below is a quantitative summary of the Draft LEDPA compared to

the proposed Project, in terms of avoidance, minimization, and mitigation of the impacts to the aquatic ecosystem within the Project area.

The Project area is comprised of approximately 660.1 acres of waters of the United States. Of the total 660.1 acres, the Draft LEDPA would avoid 561.5 acres. Stated differently, of the total 660.1 acres, the Draft LEDPA would avoid impacts to approximately 85 percent of waters of the United States, compared to 80 percent avoidance under the proposed Project.

As to the 471 acres of waters of the United States in the main stem of the Santa Clara River, under the Draft LEDPA, there would be 4.5 acres of permanent impact (1%), compared to 15.1 acres under the proposed Project. The Draft LEDPA would temporarily impact 14.6 acres, compared to 18.7 acres under the proposed Project. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, p. 56; and see Appendix 11, p. 5].)

In total, the Draft LEDPA would permanently fill approximately 66.3 acres, or 10%, of waters of the United States on site, representing a 29 percent reduction in impact acreage compared to the proposed Project. Similarly, the Draft LEDPA would temporarily disturb 32.2 acres of waters of the United States, representing a three percent decrease in impact acreage compared to the proposed Project. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, p. 56].)

As to wetlands, the Draft LEDPA would permanently disturb 7.7 acres, or 2.8%, of wetlands, representing a 62 percent reduction in impact acreage compared to the proposed Project, and would temporarily disturb 11.4 acres of wetlands, representing a two percent reduction in impact acreage compared to the proposed Project. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, p. 56].) In total, the Draft LEDPA would avoid approximately 93 percent of all on-site wetlands, representing a four percent increase in wetland avoidance compared to the proposed Project. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, p. 56].)

In all tributaries within the Project area, the Draft LEDPA would permanently impact 61.8 acres of waters of the United States, compared to 78.3 acres under the proposed Project. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, p. 56; and see Appendix 11, p. 5].) In addition, a 19-acre wetland mitigation area would be implemented in lower Potrero Canyon, contiguous with the lower mesic meadow (cismontane alkali marsh) wetland preservation area. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, p. 56].) In summary, the Draft LEDPA would preserve 131,769 linear feet (lf) of on-site tributary drainages, representing 54 percent of the total 242,049 lf of jurisdictional drainages on the Project site. Under the Draft LEDPA, the impacted drainages result from modifying specified tributary drainages, converting drainages to buried storm drain, installing bank stabilization, and constructing bridge and culvert road crossings over tributary drainages, all of which are similar to the impacts identified for Alternative 3 in the EIS/EIR. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, p. 55].)

As to spineflower, the Draft LEDPA would increase the acreage within the preserves by 39%, from 167 to 247 acres. In addition, the acreage of protected occupied spineflower habitat would increase from 13.88 acres under the proposed Project to 13.97 acres under the Draft LEDPA, while the area of impacted occupied habitat would be decreased from 6.36 acres to 5.87 acres under the Draft LEDPA. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, pp. 54-55].)

As to the 100-year floodplain within the Project site, when compared to Alternative 2, the Draft LEDPA would increase avoidance of the floodplain area by 12.8 acres, representing a one percent reduction in

impact acreage compared to the proposed Project. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, p. 55].)

As to water quality, the Draft LEDPA would be generally similar to the impacts identified for the proposed Project and Alternative 3, and would reduce water quality impacts to a less-than-significant level with implementation of project design features, best management practices (BMPs), regulatory requirements, and the mitigation measures identified in the EIS/EIR. (*Id.*)

The Draft LEDPA also would reduce total developable acreage by 13 percent compared to the proposed Project. Specifically, the residential development acreage would be reduced by 11 percent, and its corresponding unit count would be reduced by five percent (1,073 units). Commercial acreage would be reduced by 14 percent (35.6 acres), and commercial square footage would be reduced by three percent (140,000 square feet). Acreage for public facilities acreage would be reduced by four percent (six acres), while open space acreage would increase by 372.2 acres compared to the proposed Project. In addition, the Draft LEDPA would not result in disproportionate impacts to the viability of any of the approved Specific Plan villages. On balance, then, the Draft LEDPA would allow for development of the Project site consistent with the basic objectives of the Specific Plan. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, p. 62].)

Total development costs for the Draft LEDPA would be \$2,813,955,840, resulting in a cost per net developable acre increase of 4.9 percent (\$1,091,402) when compared to the proposed Project. The Draft LEDPA's increased cost per developable acre satisfies the Corps' five to ten percent cost criterion. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, pp. 44-46].) Therefore, based on the information encompassed in the Corps' draft 404(b)(1) alternatives analysis, the Corps made the preliminary determination that the Draft LEDPA would increase the cost of the proposed Project by approximately 4.9 percent and would be practicable in light of cost, logistics, and technology. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, pp. 62-63].)

Other Alternatives

The Corps' draft 404(b)(1) alternatives analysis also evaluated other alternatives (*e.g.*, Alternatives 1, 7, and 8) with less impact on waters of the United States than the Draft LEDPA. (*Id.* [Corps' draft 404(b)(1) alternatives analysis, pp. 44, 51-53, 57, and 60-62].) However, the Corps deemed those alternatives to be impracticable due to significantly increased development costs and a failure to achieve the basic objectives of the Specific Plan. For example, as to Alternative 7 (Avoidance of 100-Year Floodplain, Elimination of Two Planned Bridges, and Avoidance of Spineflower), the Corps made the determination that Alternative 7 would not meet the overall project purpose and would not be practicable in light of the substantial increase in cost per net developable acre (53 percent increase compared to the proposed Project); as a result, Alternative 7 would not represent the least environmentally damaging practicable alternative. The basis for the Corps' findings is as follows:

"Compared to the proposed project, the development facilitated under this alternative would be reduced by 46 percent. In addition, Alternative 7 would facilitate the development of 1,352.4 acres of residential uses, a reduction of 47.0 percent when compared to the proposed project. Even after incorporating feasible increases in density, Alternative 7 would allow the construction of 16,471 dwelling units, a reduction of 21 percent compared to the proposed project. Because the number of dwelling units

available under Alternative 7 would be reduced substantially (more than 20 percent compared to the number approved in the Specific Plan), Alternative 7 would fail to achieve the Specific Plan basic objectives for residential uses. Alternative 7 would facilitate the development of 125.4 acres of commercial uses, a reduction of 51 percent compared to the proposed project. With feasible increases in density, such as vertical construction, this acreage would support only 3.76 msf of commercial floor space, a substantial reduction of 32 percent when compared to the proposed project. Because the commercial floor space available under Alternative 7 would substantially reduce (more than thirty percent) the floor space that would result from build out of the Specific Plan, Alternative 7 would fail to achieve the Specific Plan basic objectives for commercial uses. Alternative 7 would yield 1,596 net developable acres at a development cost of \$2,538,137,000, which yields a substantial increase in the average development cost of \$1,590,311 per net developable acre (53 percent increase compared to the proposed project). Based on the above information, Alternative 7 would not meet the overall project purpose and would not be practicable in light of the substantial increase in cost per net developable acre. As a result, Alternative 7 would not represent the least environmentally damaging practicable alternative." (*Id.* [Corps' draft 404(b)(1) alternatives analysis, pp. 60-61].)

As to Alternative 8 (Avoidance of Waters of the United States), the Corps made the determination that this alternative would fail to achieve the Specific Plan basic objectives with respect to village development, and would not be practicable in light of the substantial increase in cost per net developable acre (29.9 percent increase compared to the proposed Project); as a result, Alternative 8 would not represent the least environmentally damaging practicable alternative. The basis for the Corps' findings is as follows:

"Compared to the proposed project, the development facilitated under this alternative would be reduced by 28.5 percent. Due to this substantial reduction, Alternative 8 would not meet the basic objective with regard to net developable acreage. Of the 2,144.9 acres of total development area, approximately 1,831.7 acres would be residential development area. Alternative 8 would facilitate urban development within the project site, but less than the proposed project (12 percent reduction in dwelling units as compared to the proposed project). This alternative would include one bridge across the Santa Clara River, but would not include bridges at Commerce Center Drive and Potrero Canyon Road. As a result, a substantial portion of the development reduction would occur in the easternmost portion of the project site. The configuration of developable space under Alternative 8 would preclude the construction of a coherent village in this location. For this reason, Alternative 8 would fail to achieve the Specific Plan basic objectives for villages. Alternative 8 would yield a total of 2,144.9 net developable acres at a total development cost of \$2,890,933,000, which yields a substantial increase in the average development cost of \$1,347,817 per net developable acre (29.9 percent increase compared to the proposed project). These costs would be substantially greater than the proposed project and, as a result, would not be practicable for a project of this type. Based on the above information, Alternative 8 would not meet the overall project purpose and would not be practicable in light of the substantial increase in cost per net developable acre. As a result, Alternative 8 would not represent the least environmentally

damaging practicable alternative." (*Id.* [Corps' draft 404(b)(1) alternatives analysis, pp. 61-62].)

Further Evaluation

After publication of the Corps' draft 404(b)(1) alternatives analysis in the Final EIS/EIR, USEPA, Regional Board, and others, questioned whether the applicant had met its burden that further avoidance of waters of the United States is not practicable, beyond the avoidance identified in the Corps' Draft LEDPA. As a result, the Corps sent a letter to the applicant on September 27, 2010, requesting additional information for the Corps' final 404(b)(1) alternatives analysis and compensatory mitigation program. In that letter, the Corps requested that the applicant respond to comments regarding the practicability of additional avoidance of waters of the United States, including wetlands.

In response to the Corps' directive, the applicant has prepared a "supplement" to the applicant's prior draft 404(b)(1) alternatives analysis. (A copy of the applicant's supplement is included as **Attachment F06-1** to these responses.) This supplement includes an additional analysis of avoidance opportunities within the Project area, including Potrero Canyon, Long Canyon, Chiquito Canyon, San Martinez Grande Canyon, and Middle Canyon.

Final LEDPA

The Corps has continued to evaluate and further minimize impacts to waters of the United States in response to comments received on the Final EIS/EIR. Based on the supplemental analysis, and other relevant information, the Corps has considered the comments received on the Final EIS/EIR, and has conducted its own independent further review of all available information in completing the Corps' final 404(b)(1) alternatives analysis, which has identified the final LEDPA. The final LEDPA is to be completed by the Corps and will be included in the Record of Decision. Please refer to the Corps' Record of Decision, which summarizes the final LEDPA and includes as **Appendix A** the Corps' final 404(b)(1) alternatives analysis.

Specific Responses to Regional Board

In response to the Regional Board's August 25, 2009 comment letter, the Draft LEDPA was developed as a hybrid of Alternative 3. The Draft LEDPA also was compared to several alternatives, with a focus on a comparison between the Draft LEDPA and Alternatives 3, 4, 5, and 6.¹ As summarized from page 5 of Appendix 11 of the applicant's draft 404(b)(1) alternatives analysis, the Draft LEDPA would substantially avoid and minimize adverse impacts to waters of the United States:

¹ Based on information presented in the Corps' draft 404(b)(1) alternatives analysis, the Corps determined that both Alternatives 7 and 8 would not meet the overall project purpose and would not be practicable in light of the substantial increase in cost per net developable acre. As a result, the Corps determined that neither alternative would represent the least environmentally damaging practicable alternative. (Final EIS/EIR, **Appendix F1.0** [Corps' draft 404(b)(1) alternatives analysis, pp. 60-62].)

Evaluation of Draft LEDPA					
Alternative	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Draft LEDPA
Total acres of WOUS Impacted (permanent)	70.0	73.3	72.4	60.7	66.3
Total acres of WOUS Impacted (temporary)	37.6	33.8	41.6	33.9	32.2
% of WOUS Impacted (permanent and temporary)	17%	17%	18%	15%	15%

Note: WOUS = waters of the United States

Source: Applicant's draft 404(b)(1) alternatives analysis, Appendix 11, p. 5.

The Draft LEDPA incorporates the alternative- and drainage-specific design recommendations of the Regional Board and results in fewer permanent impacts to waters of the United States than Alternatives 3, 4, and 5, and slightly more combined permanent and temporary impacts than Alternative 6. When compared to the average of the combined permanent and temporary impacts of Alternatives 3, 4, 5, and 6 (105.8 acres), the Draft LEDPA results in 7.4 fewer acres of combined impacts to waters of the United States.

2.2 Alternatives/Hydromodification

The Regional Board indicates that the responses to its prior August 25, 2009 comment letter lacked substantive information regarding the Regional Board's recommendations in particular drainages and requested that additional language responding to Regional Board's 2009 comments be included in the Final EIS/EIR.

Response: In response to that concern, the Corps, in consultation with CDFG, has provided additional detail for the drainages identified in the Regional Board's Final EIS/EIR comment letter. For convenience, the response provided in the Final EIS/EIR is quoted below, followed by supplemental information presented in an underline format. First, however, the Corps responds generally to the Regional Board's comment.

As shown below, the Regional Board's original comment suggested that specified design features included in Alternatives 3 and 4 should be incorporated into the design of the RMDP infrastructure proposed for the Potrero Canyon area, including the overall design for the Potrero area included in Alternative 3 and the bridge design included in Alternative 4. In response, the Corps incorporated the design elements of Alternatives 3 and 4 by eliminating the Potrero Canyon Road Bridge in the Draft LEDPA, which would further avoid permanent and temporary impacts to waters of the United States, including wetlands. The Draft LEDPA also included the preservation of the cismontane alkali marsh (CAM) in the lower Potrero Canyon.

Overall, the Draft LEDPA would permanently impact approximately 66.3 acres of waters of the United States, compared to 93.3 acres under the proposed Project (Alternative 2). Thus, the Draft LEDPA, when compared to the proposed Project, has reduced permanent impacts to waters of the United States by 27 acres, or 29 percent. (See Final EIS/EIR, **Appendix F1.0** [Corps' draft 404(b)(1) alternatives analysis, p. 1 (reflecting 93.3 acres of permanent impacts under Alternative 2), and p. 56 (reflecting the 66.3 acre/29 percent reduction of permanent impacts)].)

The lead agencies respond further to the Regional Board's comment by quoting the original **Response 6** relative to Potrero Canyon, followed by supplemental information.

Original Response 6 (Potrero Canyon)

"Response 6

This comment suggests that specified design features included in Alternatives 3 and 4 should be incorporated into the design of Resource Management and Development Plan (RMDP) infrastructure proposed for the Potrero Canyon area. The suggested design features include the overall design for the Potrero area included in Alternative 3, and the bridge design included in Alternative 4. The impacts of the specified design elements were evaluated in the Draft EIS/EIR. The U.S. Army Corps of Engineers (Corps) and California Department of Fish and Game (CDFG) appreciate the suggestion to include these design features in the proposed Project. This suggestion will be included as part of the record and made available to decision makers prior to a final decision on the proposed Project.

As required by the Clean Water Act section 404(b)(1) Guidelines, the Corps has prepared a draft 404(b)(1) alternatives analysis (Final EIS/EIR, **Appendix F1.0**) and identified the Draft Least Environmentally Damaging Practicable Alternative (Draft LEDPA). The Draft LEDPA incorporates practicable waters of the United States and wetland avoidance and minimization design features, including measures identified in the Draft EIS/EIR. The Santa Clara River bridge design elements of Alternatives 3 and 4 (elimination of Potrero Bridge) have been incorporated into the Draft LEDPA. This comment will be considered by the Corps in identifying the Final LEDPA and by CDFG prior to making a decision on the proposed Project." (Italics added.)

Supplemental Information to Response 6 (Potrero Canyon):

The Regional Board specifically recommended Alternative 3, "which largely avoids permanent impacts" and "the bridge component of Alternative 4 [which eliminates the Potrero Canyon Road Bridge across the Santa Clara River and related impacts to waters of the United States in lower Potrero Canyon]." The Draft LEDPA and Alternative 3 result in the same amount of avoidance (14.0 acres) within the Potrero Canyon study area, including preservation of the CAM in the lower Potrero Canyon, and the elimination of the Potrero Canyon Road Bridge component. Therefore, the Draft LEDPA represents a hybrid of Alternative 3 and Alternative 4. Thus, the Draft LEDPA is consistent with the Regional Board's August 25, 2009 recommendations relative to Potrero Canyon. The drainage-specific analysis conducted to develop the Draft LEDPA design in Potrero Canyon is presented in the applicant's draft 404(b)(1) alternatives analysis found in **Appendix F1.0** of the Final EIS/EIR. **Figure 3.0-51 in Section 3.0** of the Final EIS/EIR illustrates the drainage design and related components of the Draft LEDPA within Potrero Canyon. **Section 3.0** of the Final EIS/EIR also contains a detailed description of the modified, converted, and preserved tributary drainages within the Project area, including Potrero Canyon, under the Draft LEDPA. (See Final EIS/EIR, **Section 3.0**, pp. 3.0-150 through 3.0-160.)

In addition, the Regional Board compared the Draft LEDPA to Alternative 3, stating that the Draft LEDPA's overall "drainage modified" and "drainage converted into storm drain" are greater under the Draft LEDPA and the "preserve drainage" is less. The Regional Board then questioned how this comparison "comport[s] with avoidance of impacts in Potrero Canyon." In making this comment, the Regional Board relied on the linear foot metric for comparison purposes. In other words, the Regional Board looked to the linear feet of "drainage modified," "drainage converted to buried storm drain," and "preserved drainage" in Potrero Canyon when comparing the Draft LEDPA and Alternative 3. However, the Final EIS/EIR used linear feet to describe proposed Project and alternative RMDP infrastructure features; linear feet was not used in assessing permanent impacts to waters of the United States. Instead, the Final EIS/EIR and the Corps' draft 404(b)(1) alternatives analysis relied on an acreage metric in assessing permanent impacts to waters of the United States under the proposed Project and alternatives, including the Draft LEDPA.

Based on acres impacted, the Draft LEDPA would preserve the same amount of waters of the United States as Alternative 3 in Potrero Canyon, and when compared to the proposed Project (Alternative 2), the Draft LEDPA would increase the acres preserved in Potrero Canyon by 8.4 acres, as shown in the table below (14 acres - 5.6 acres = 8.4 acres).

In addition, as shown in the table below, the Draft LEDPA would reduce permanent impacts to waters of the United States within Potrero Canyon when compared to both Alternative 2 and Alternative 3. The Draft LEDPA, compared to Alternative 2, would reduce impacts to waters of the United States within Potrero Canyon by 11.3 acres (33.1 acres - 21.8 acres = 11.3 acres). The Draft LEDPA, compared to Alternative 3, would reduce such impacts by 1.4 acres (23.2 acres - 21.8 acres = 1.4 acres).

Comparison of Impacts and Preserved Acreage in Potrero Canyon
Total Area of WOUS in Potrero Canyon: 38.7 acres

	Alternative 2	Alternative 3	Draft LEDPA
Total Acres of Permanent Impact to WOUS in Potrero Canyon	33.1 acres	23.2 acres	21.8 acres
Total Acres of Temporary Impact to WOUS in Potrero Canyon	0.0 acres	1.5 acres	2.9 acres
Total Preserved Acreage in Potrero Canyon	5.6 acres	14.0 acres	14.0 acres

Note: WOUS = waters of the United States

Source: Final EIS/EIR, Section 4.6, Jurisdictional Waters and Streams. Please refer to Revised Table 4.6-3 (Total Corps' Jurisdictional Waters within RMDP site), Revised Table 4.6-4 (Alt 2), Revised Table 4.6-8 (Alt 3), and New Table 4.6-28a (Draft LEDPA).

In addition to the above supplement to Response 6, as stated above, the Corps requested that the applicant provide additional information for the Corps' final 404(b)(1) alternatives analysis and compensatory mitigation program. Specifically, the Corps requested that the applicant provide supplemental information addressing additional

avoidance of waters of the United States. The final LEDPA is to be completed by the Corps and will be included in the Record of Decision. Please refer to the Corps' final 404(b)(1) alternatives analysis, which identifies the final LEDPA (see Corps' Record of Decision, Appendix A).

The Regional Board states that there was no substantive response to its comments relative to San Martinez Grande Canyon, and expressed a preference for incorporating the Alternative 5 design for the canyon in the Draft LEDPA. The lead agencies respond further to the Regional Board's comment by quoting the original **Response 7** relative to San Martinez Grande Canyon, followed by supplemental information.

Original Response 7 (San Martinez Grande Canyon)

"Response 7

This comment suggests that specified design features included in Alternative 5 should be incorporated into the design of RMDP infrastructure proposed for the San Martinez Grande area. The suggested design features include a redesign of proposed major tributary configurations in this area. The impacts of the specified design elements were evaluated by the Draft EIS/EIR. The Corps and CDFG appreciate the suggestion to include these design features in the proposed Project. This suggestion will be included as part of the record and made available to decision makers prior to a final decision on the proposed Project.

As required by the Clean Water Act section 404(b)(1) Guidelines, the Corps has prepared a draft 404(b)(1) alternatives analysis (**Appendix F1.0**) and identified the Draft LEDPA. The Draft LEDPA incorporates practicable waters of the United States and wetland avoidance and minimization design features, including measures identified in the Draft EIS/EIR. This comment will be considered by the Corps in identifying the Final LEDPA and by CDFG prior to making a decision on the proposed Project." (Italics added.)

Supplemental Information to Response 7 (San Martinez Grande Canyon):

The Regional Board's August 25, 2009 comment letter specifically recommended the components of Alternative 5 for San Martinez Grande Canyon because of its greater avoidance and widened channel design. The Draft LEDPA incorporated sub-alternative SMG-2 for San Martinez Grande Canyon, which was an Alternative 5 "hybrid" design that had approximately 0.5 acre less avoidance than Alternative 5. This sub-alternative (SMG-2) was selected to address CDFG concerns regarding the need to enlarge the San Martinez Grande spineflower preserve, resulting in less avoidance than Alternative 5. (See applicant's draft 404(b)(1) alternatives analysis, Appendix 11, p. 15 [see San Martinez Grande Canyon, "total acres of WOUS avoided" row].) In balancing consideration of waters of the United States avoidance, expanded spineflower preserve acreage, and maintaining the overall project purpose, the additional avoidance of waters of the United States (0.5 acre) was determined to be impracticable. Therefore, the Draft LEDPA represented a hybrid of Alternative 5, which is consistent with the Regional Board's August 25, 2009 recommendations. The drainage-specific analysis conducted to

develop the Draft LEDPA design in San Martinez Grande Canyon is presented in the applicant's draft 404(b)(1) alternatives analysis found in **Appendix F1.0** of the Final EIS/EIR. **Figure 3.0-50** in **Section 3.0** of the Final EIS/EIR illustrates the drainage design and related components of the Draft LEDPA within San Martinez Grande Canyon. **Section 3.0** of the Final EIS/EIR also contains a detailed description of the modified, converted, and preserved tributary drainages within the Project area, including San Martinez Grande Canyon, under the Draft LEDPA. (See Final EIS/EIR, **Section 3.0**, pp. 3.0-150 through 3.0-160.) Based on this analysis, the Draft LEDPA's incorporation of sub-alternative SMG-2 (San Martinez Grande Canyon) would have 0.1 acre of permanent impacts and 1.7 acres of temporary impacts to waters of the United States.

Since publication of the Final EIS/EIR, and at the Corps' request, the applicant has evaluated another variation of sub-alternative SMG-2 (San Martinez Grande Canyon) that is similar to the configuration of the San Martinez Grande Canyon drainage included in Alternative 5. This new sub-alternative, designated SMG-2b, would further reduce temporary impacts by eliminating a small development area between the stream channel and an existing road. (See **Attachment F06-1** to these responses for Figure SMG-2b to the applicant's supplement to its draft 404(b)(1) alternatives analysis.) This new sub-alternative (SMG-2b) would not change permanent impacts to waters of the United States compared to the Draft LEDPA; however, it would reduce temporary impacts within San Martinez Grande Canyon to 1.2 acres, a reduction of 0.5 acre compared to the Draft LEDPA. This new sub-alternative (SMG-2b) also would increase direct costs by \$1,005,000 over the Draft LEDPA and would not reduce development acreage. (See **Attachment F06-1** to these responses for the applicant's supplement to its draft 404(b)(1) alternatives analysis, p. 6.) Because this new sub-alternative (SMG-2b) would not provide additional avoidance of permanent impacts compared to the Draft LEDPA, and because it would avoid only 0.5 acre of additional temporary impacts, the applicant considers it marginal whether the benefits of the avoidance outweigh the direct costs per acre of temporarily avoided waters. (*Id.*) Consideration of this alternative as part of the final LEDPA is to be completed by the Corps, and will be included in the Record of Decision.

The applicant's supplement (**Attachment F06-1**) also has included a further analysis of the other sub-alternatives to San Martinez Grande Canyon (SMG-3 and SMG-4). Based on that further analysis, those sub-alternatives would, among other things, result in significantly greater costs and lost development acreage, rendering them impracticable. (See **Attachment F06-1** [applicant's supplement, pp. 20-21].)

The Regional Board states that there was no substantive response to its comments relative to Chiquito Canyon, and expressed a preference for bridges instead of culverts as proposed in Alternative 6. The lead agencies respond further to the Regional Board's comment by quoting the original **Response 7** relative to Chiquito Canyon, followed by supplemental information.

Original Responses 8 and 9 (Chiquito Canyon)

"Responses 8 and 9

This comment suggests that specified design features included in Alternatives 3 and 6 should be incorporated into the design of RMDP infrastructure proposed for Chiquito Canyon. The suggested design features include a redesign of proposed major tributary configurations in this area, and that bridges are provided for road crossings instead of using culverts. This comment also recommends that the use of bridges instead of culverts for road crossings should be considered in other major tributaries on the Project site. The impacts of the specified design elements were evaluated in the Draft EIS/EIR. The Corps and CDFG appreciate the suggestion to include these design features in the proposed Project. This suggestion will be included as part of the record and made available to decision makers prior to a final decision on the proposed Project.

As required by the Clean Water Act section 404(b)(1) Guidelines, the Corps has prepared a draft 404(b)(1) alternatives analysis (**Appendix F1.0**) and identified the Draft LEDPA. The Draft LEDPA incorporates practicable waters of the United States and wetland avoidance and minimization design features, including measures identified in the Draft EIS/EIR. This comment will be considered by the Corps in identifying the Final LEDPA and by CDFG prior to making a decision on the proposed Project." (Italics added.)

Supplemental Information to Responses 8 and 9 (Chiquito Canyon and Tributaries Bridges):

Supplemental Information to Response 8 (Chiquito Canyon)

The Regional Board recommended Alternatives 3/6 for Chiquito Canyon (Alternatives 3 and 6 incorporated the same design for Chiquito). The Regional Board stated its preference for greater avoidance and widened channel design in Alternatives 3/6, when compared to the proposed Project (Alternative 2). A special study of Chiquito Canyon was conducted. (See Final EIS/EIR, **Appendix F1.0** [applicant's draft 404(b)(1) alternatives analysis, pp. 10-1 through 10-15.]) The purpose of this study was to determine whether additional avoidance of waters of the United States was practicable within Chiquito Canyon, a large intermittent, ephemeral tributary drainage to the north bank of the Santa Clara River within the RMDP site. (*Id.*) As part of this special study, sub-alternative CH-2 was identified, among others, for Chiquito Canyon. (*Id.*) The Draft LEDPA incorporated sub-alternative CH-2 (Chiquito Canyon). The Alternatives 3/6 Chiquito Canyon component would result in 0.2 acre of avoidance, as compared to 4.3 acres under the Draft LEDPA, which also included a widened channel design that would reduce temporary and permanent impacts compared to the narrower design of Alternatives 3/6. (See applicant's draft 404(b)(1) alternatives analysis, Appendix 11, p. 12 [see Chiquito Canyon, "total acres of WOUS avoided" row].) Therefore, the Draft LEDPA represented a hybrid of Alternatives 3/6, providing more avoidance than Alternatives 3/6; it also is consistent with the Regional Board's August 25, 2009 recommendations. **Figure 3.0-49** in **Section 3.0** of the Final EIS/EIR illustrates the drainage design and related components of the Draft LEDPA within Chiquito Canyon. **Section 3.0** of the Final EIS/EIR also contains a detailed description of the modified.

converted, and preserved tributary drainages within the Project area, including Chiquito Canyon, under the Draft LEDPA. (See Final EIS/EIR, Section 3.0, pp. 3.0-150 through 3.0-160.)

Supplemental Information to Response 9 (Tributary Bridges)

The Regional Board recommended that a majority of tributary road crossings be constructed as bridges instead of culverts, as proposed in Alternative 6 where there would be nine tributary bridges over Potrero and San Martinez Grande Canyons. The Draft LEDPA proposed that three tributary road crossings be constructed as bridges over Potrero, Chiquito, and San Martinez Grande Canyons, as opposed to the nine identified in Alternative 6. The Draft LEDPA, which is a hybrid of Alternative 3, has incorporated the three bridges at those selected locations specifically to enhance avoidance of waters of the United States. The total tributary bridge cost under Alternative 6 is \$48,416,400, compared to the Draft LEDPA's bridge cost of \$16,038,480. Based on a review of tributary road crossing impacts in the Final EIS/EIR (Tables 4.6-20 and 4.6-28a), Alternative 6 has a total of 0.9 acre of impacts to waters of the United States, and the Draft LEDPA has 1.8 acres of impacts. Therefore, the six additional bridges under Alternative 6 would result in 0.9 fewer acres of impact to waters of the United States when compared to the Draft LEDPA, but at an additional cost of \$32,377,920. This additional cost was determined to be cost impracticable. Please see Attachment F06-2 to these responses for a copy of the Hunsaker technical memorandum, dated September 16, 2010. This memorandum conducts a cost comparison of the tributary bridge crossings as between Alternative 6 and the Draft LEDPA.

2.3 Low-Impact Development (LID)

Regional Board states that further detail is needed in the Final EIS/EIR with respect to LID implementation. Regional Board's comments also focus on **Response 11** to its prior August 25, 2009 comment letter (Letter 011). The responses provided below are intended to provide further information concerning the proposed Project's LID implementation.

2.3.1 Low Impact Development -- Response 11

The Regional Board's prior August 25, 2009 comment letter stated that specific ideas for LID implementation had not been sufficiently discussed in the Draft EIS/EIR. In addition, Regional Board's August 3, 2010 letter states that LID implementation has not been sufficiently developed in the Draft LEDPA and that the analysis presented in the Final EIS/EIR is inadequate in its scale and content. The Regional Board requests more detail, "beyond the conceptual level presented in the Final EIS/EIR." The comment notes that expectations for the Water Quality Technical Reports and Drainage Concept Reports (WQTRs and DCRs) were established in letters written in November 2007 and May 2008.

The Regional Board further states that, in order to develop the LEDPA, the project-specific stormwater mitigation measures must be clearly demonstrated and transparent within this level of alternative analysis and that the plan should include specific LID components to be incorporated into the proposed Project at the lot and parcel levels. According to the Regional Board, "[t]hese components should fulfill the current requirements of the Los Angeles County MS4 Permit for new development, at a minimum, and should

include in much greater detail (village level and land use scale) information on post-development site design/low impact development strategies, hydromodification control project features, source control BMPs, and treatment BMPs."

Response: First, due to the planning scale for this Project (Specific Plan scale), it is not practical to identify and locate specific LID, source control, treatment control, and hydromodification control BMPs. As identified in **Table 1** below, the Newhall Ranch Specific Plan Sub-Regional Stormwater Mitigation Plan (SWMP), which applies to the entire Newhall Ranch Specific Plan area (Tier 1), is at a one inch to 400 feet map scale. At this scale, only the allowable land uses are identified (see **Figure 2.0-7** in the Final EIS/EIR). As there are no approved tract maps (and, therefore, no lots or parcels) identified at this point in time, it is not possible to include specific LID components to be incorporated at the lot and parcel scale. In contrast, the project-level Water Quality Technical Report (Tier 2) will identify the specific LID, source control, treatment control, and hydromodification control BMPs for each of the villages within the Specific Plan area (see **Table 1**). The Final EIS/EIR and the Newhall Ranch Sub-Regional SWMP establishes the performance standards for site design, LID, hydrologic control, source control, and treatment control BMPs. Further, the Final EIS/EIR and the Newhall Ranch Sub-Regional SWMP identify menus of BMPs that the Project can implement on a phased basis to achieve compliance with the specified performance standards to assure mitigation of potentially significant adverse water quality impacts to a level that is less than significant. Further, the Final EIS/EIR also would not allow the occurrence of physical changes to the environment associated with development of any phase of the Project, unless and until a Project EIR/Water Quality Technical Report and then a project-specific SUSMP are prepared demonstrating that BMPs achieving compliance with the specified performance standards have been incorporated into the phase of the project proposed to proceed to development. Table 1 clarifies this tiered approach to identification, planning, design, and finally engineering of BMPs providing sufficient mitigation for significant adverse water quality impacts of the Project and its alternatives, including the LEDPA.

Table 1 Newhall Land Project Tiered Stormwater Plan Preparation as of 2010					
Tier	Stormwater Plan	Review/ Approval	Projects	Review Timing	Map Scale
1	Newhall Ranch Sub-Regional SWMP	RWQCB	Newhall Ranch (EIS/EIR)	Approved May 20, 2008	1" = 400'
2	Project EIR/Water Quality Technical Report	RWQCB and DPW (review via CEQA)	Landmark Village	With Project Draft EIR	1" = 100'
			Mission Village		
			Entrada		
2	Drainage Concept Report	DPW	Homestead	Concurrent with Tentative Tract Map	1" = 100'
			Potrero Valley		
3	Project SUSMP	DPW	All	Prior to recording final subdivision map or issuance of any grading or building permit (whichever comes first)	1" = 40'

As explained in the Final EIS/EIR, which is the Tier 1 level analysis, Tier 2 of stormwater plan preparation is a project-level Water Quality Technical Report (WQTR) for each Specific Plan project (*i.e.*, Landmark Village, Mission Village, Homestead, and Potrero Valley) that must demonstrate consistency of the Project and its BMPs with the terms, content, and specified water quality performance standards of the Newhall Ranch Sub-Regional SWMP. The WQTR will provide more specific information and detail concerning how the provisions of the Newhall Ranch Sub-Regional SWMP will be implemented within the area covered by the WQTR and which BMPs will be utilized to achieve specified water quality performance standards, based upon the actual proposed land uses from the tentative tract maps processed by the County of Los Angeles (this level of detail is usually at a scale of 1" = 100'). An example of Tier 2 is the Landmark Village WQTR, which served as the water quality technical appendix to the Recirculated Draft Environmental Impact Report (RDEIR). (See RDEIR, **Appendix 4.3** [Landmark Village WQTR, dated February 2008].) The Landmark Village WQTR is included as **Attachment F02-3** to these responses in order to illustrate the Tier 2 analysis.

Concurrently with the preparation of each project WQTR, Tier 2 includes the Drainage Concept Report to be prepared for the Los Angeles County Department of Public Works (DPW). The purpose of the Drainage Concept Report is to provide technical support and analysis of the hydrologic drainage requirements as a result of the proposed tentative tract maps. The Drainage Concept Report and project WQTR will be prepared to describe the LID, treatment control, and hydromodification control BMPs for the Project and assure satisfaction of all Tier 1 environmental analysis requirements and performance standards. By way of example, the Landmark Village Drainage Concept Report also is included as **Attachment F02-4** to these responses in order to illustrate the Tier 2 analysis.

At the Tier 3 project-level, project-specific SUSMPs would be prepared to provide final design, sizing, engineering, and location of BMPs and water quality measures that would be implemented pursuant to the terms and conditions of, and which will comply with, the water quality performance standards set forth in the Tier 1 Final EIS/EIR, the Newhall Ranch Sub-Regional SWMP, and the Tier 2 Project WQTR and Drainage Concept Report. No project impacts are permitted until the SUSMP is prepared in satisfaction of the requirements specified in the Tier 1 and Tier 2 documents.

The Landmark Village project, located within the Newhall Ranch Specific Plan, was also evaluated by Geosyntec for LID equivalency with the Los Angeles County LID Ordinance and related LID Standards Manual. Although the Landmark Village project is grandfathered under the current County LID Ordinance and Manual performance standards, Geosyntec's equivalency evaluation was performed to assess the effectiveness of the Landmark Village stormwater management system in meeting the most recently adopted Los Angeles County LID performance standards. The results of Geosyntec's evaluation showed that Landmark Village's vegetated treatment control BMPs, with modifications to incorporate infiltration BMPs or to enhance the infiltration capacity of the treat and release vegetated BMPs during the Tier 3 SUSMP stormwater planning step, would result in average annual volume reductions equivalent to those that would be achieved by other LID BMPs designed pursuant to the County's LID Standards Manual requirements, which represent the most recent LID regulatory benchmark. A copy of Geosyntec's technical memorandum evaluating the Landmark Village project's LID equivalency with the County's LID Ordinance is included as **Attachment F02-5** to these responses.

Because the Final EIS/EIR and the Newhall Ranch Sub-Regional SWMP require the project proponent to specify and demonstrate implementation of one or more specified BMPs (or newer BMPs with equivalent or better water quality efficacy) as necessary to meet specified and measureable water quality

performance standards before any project-related environmental impacts can commence, the level of detail for such BMPs is sufficient to satisfy CEQA requirements for this first tier level of environmental analysis, and to assure adequate mitigation of water quality related impacts.

Finally, the Regional Board has referenced two of its prior letters, one dated November 26, 2007; and the second dated May 20, 2008. Regional Board has referenced these two letters, stating they reflect its "expectations" of the "Water Quality Technical Reports and Drainage Concept Reports . . . in the *EIS/EIR*." (Italics added.)

Based on Regional Board's comments, there appears to be a misunderstanding over the three-tiered process for the Newhall Ranch Sub-Regional SWMP. At no time was the EIS/EIR for the proposed Project to include the WQTRs and DCRs as part of the EIS/EIR. Instead, consistent with the three-tier process for the Newhall Ranch Sub-Regional SWMP, which was approved by Regional Board staff, project-specific WQTRs and DCRs were to be prepared as part of the Tier 2 project EIRs to be processed by the County of Los Angeles (as explained further below).

First, this three-tiered process was explained in the applicant's letter to the Regional Board, dated July 10, 2007. The letter also was accompanied by the technical memorandum prepared by Geosyntec Consultants, dated July 5, 2007. In the letter, the applicant set forth the "approval process for stormwater plan preparation for Newhall Ranch that increases in detail with each tier starting with the Newhall Ranch Specific Plan Sub-Regional Stormwater Mitigation Plan continuing to the final implementation step, project-level SUSMP." The letter confirmed that "[e]ach subsequent tier implements the stormwater mitigation criteria of the prior tier."

In addition, the Geosyntec memorandum, page 1, clarified the three levels of stormwater plan preparation for Newhall Ranch. The three tiers of stormwater plan preparation also were summarized in a table shown on page 1 of the memorandum. While the table from the Geosyntec July 5, 2007 memorandum is similar to "Table 1," cited above, the prior table confirms that the EIS/EIR was not intended to include the project-level WQTRs and DCRs; instead, the project-specific WQTRs and DCRs were to be prepared as part of the Tier 2 project EIRs for each of the tract maps within the Newhall Ranch Specific Plan (Landmark Village, Mission Village, Homestead, and Potrero Valley). The table shown in the Geosyntec July 5, 2007 memorandum is duplicated below:

Table 1: Newhall Land Project Tiered Stormwater Plan Preparation

Tier	Stormwater Plan	Review/Approval	Project	Timing
1	Newhall Ranch Specific Plan Sub-Regional Stormwater Mitigation Plan	LARWQCB	Newhall Ranch	July 2007
2	Project EIR/Water Quality Technical Report	LARWQCB and LACDPW (review via CEQA)	Landmark Village	January 2007
			Mission Village	September 2007
			Homestead	October 2008
			Potrero Valley	June 2009
2	Drainage Concept Report	LACDPW	All	Concurrent with Tentative Tract Map
3	Project SUSMP	LACDPW	All	Prior to recording the final subdivision map or the issuance of any grading or building permit (whichever comes first)

Source: Duplicated from Geosyntec Memorandum, dated July 5, 2007.

Second, the Regional Board's prior November 26, 2007 letter acknowledged three important points relative to the Newhall Ranch stormwater plan preparation: (1) Part 4 Section D.9 of the Los Angeles County Municipal Stormwater Permit incorporates provisions for regional or subregional approaches to mitigating stormwater runoff from new development or redevelopment; (2) the Newhall Ranch Sub-Regional SWMP was supported by Regional Board staff; and (3) the Newhall Ranch Sub-Regional SWMP was supported as a "three-tiered" SWMP approach. The Regional Board's November 26, 2007 letter also identified the steps involved in each of the three tiers (Tier 1, Tier 2, and Tier 3).

Consistent with the Regional Board's November 26, 2007 letter, the Newhall Ranch Sub-Regional SWMP has been completed for the proposed Project (at the Specific Plan scale), representing completion of Tier 1. Tier 2 involves the preparation of project EIRs for the subdivision map projects within the Project area. In conjunction with those project EIRs processed by the County of Los Angeles, the applicant is required to prepare the project-level WQTRs and DCRs. As those reports are completed at the project EIR stage, the applicant will have completed Tier 2. Tier 3 represents the final phase, resulting in the preparation of project Standard Urban Stormwater Mitigation Plans (SUSMPs) for each subdivision map, which is to be approved by Los Angeles County DPW.

Importantly, Regional Board staff appears to understand this three-tiered process as indicated in Regional Board's referenced May 20, 2008 letter. In that letter, Regional Board staff reviewed the Newhall Ranch Sub-Regional SWMP and determined that it "adequately covered the requirements of Part 4, Section D.9 of the Los Angeles County Municipal Separate Storm Sewer System Permit." This letter also acknowledged that the Newhall Ranch Sub-Regional SWMP "is considered the Tier 1 of the three-tiered approach . . . for the Newhall Ranch's 11,999-acre mixed-use development." In the letter, Regional Board staff noted that "as Newhall Land proceeds with the development of the five villages, water quality technical reports and drainage concept reports for each or combination of the five villages need to be prepared."

This statement appears to reflect Regional Board's understanding that the WQTRs and DCRs would be part of the "village" subdivision maps and associated project EIRs to be processed through the County of Los Angeles, and *not* the EIS/EIR prepared for the proposed Project. Consistent with both letters, the Tier 2 WQTRs and DCRs would be part of the "village" subdivision maps and associated project EIRs to be processed through the County of Los Angeles, and *not* the EIS/EIR prepared for the proposed Project. Also consistent with Regional Board's approved three-tiered process, the Landmark Village EIR, which represents the first tract map within the previously approved Specific Plan, provided a detailed project-level water quality analysis, and the EIR appendices included the Landmark Village WQTR and DCR. (The applicant's letter, dated July 10, 2007, along with the Geosyntec memorandum, dated July 5, 2007 are appended as **Attachment F06-3** to these responses; and the Regional Board's November 26, 2007 and May 20, 2008 letters are appended as **Attachments 02-1**, and **02-2**, respectively, to these responses.)

2.3.2 Compliance with Los Angeles County MS4 Permit

In response to Regional Board's comments, the site design/LID strategies and hydromodification control, source control, and treatment control BMPs that are listed in the menu of BMPs identified in the Final EIS/EIR and the Newhall Ranch Sub-Regional SWMP fulfill the requirements of Section 4D (Development Planning Program) of the current Los Angeles County MS4 Permit for new development, as described below:

- *Minimize impacts from stormwater and urban runoff on the biological integrity of Natural Drainage Systems and water bodies in accordance with requirements under CEQA (Cal. Pub. Resources Code § 21100), CWC §13369, CWA § 319, CWA § 402(p), CWA § 404, CZARA § 6217(g), ESA § 7, and local government ordinances.*

The hydromodification and biological impact analyses in the Final EIS/EIR (Section 4.2, Geomorphology and Riparian Resources and Section 4.5, Biological Resources) show that no adverse impact on biological integrity of Santa Clara River and tributaries would occur as a result of the build-out of the Specific Plan with implementation of the site design/LID strategies and hydromodification control, source control, and treatment control BMPs included in the Newhall Ranch Sub-Regional SWMP.

- *Maximize the percentage of pervious surfaces to allow percolation of stormwater into the ground.*

Approximately 70% (8,335 acres) of the 11,999-acre Specific Plan subregion will remain undeveloped in the River Corridor SMA/SEA 23, High Country SMA/SEA 20, Salt Creek dedication and management area, and San Fernando Valley Spineflower CDFG Conservation Easement areas. The remaining 3,665 acres (approximately 30% of Specific Plan area) will be developed, of which approximately 55% will be pervious landscaping.

- *Minimize the quantity of stormwater directed to impervious surfaces and the MS4.*

The stormwater management system is based on the use of vegetated BMPs, including bioretention, vegetated swales, and/or extended detention basins, to promote runoff retention through infiltration and evapotranspiration.

- *Minimize pollution emanating from parking lots through the use of appropriate Treatment Control BMPs and good housekeeping practices.*

Stormwater runoff from parking lots will be directed to vegetated treatment control BMPs. Porous pavement will be used in some parking areas.

- *Properly design and maintain Treatment Control BMPs in a manner that does not promote the breeding of vectors.*

The BMPs will be maintained pursuant to the maintenance standards established in the Los Angeles County DPW Stormwater BMP Design and Maintenance Manual.

- *Provide for appropriate permanent measures to reduce stormwater pollutant loads in storm water from the development site.*

The stormwater treatment control BMP sizing performance standard established in the Newhall Ranch Sub-Regional SWMP (80% capture of the average annual runoff volume) exceeds the SUSMP requirement (the volume of runoff produced from a 0.75 inch storm event).

- *Peak Flow Control: control post-development peak storm water runoff discharge rates, velocities, and duration (peak flow control) in Natural Drainage Systems (i.e., mimic pre-development hydrology) to prevent accelerated stream erosion and to protect stream habitat.*

The Newhall Ranch Sub-Regional SWMP describes the hydromodification control approach for the build-out of the Specific Plan. The hydromodification control analysis in the Final EIS/EIR (**Section 4.2, Geomorphology**) shows that stream erosion will not be accelerated and stream habitat will be protected.

2.4 Water Quality

The comment requests that information included in **Responses 13** and **15** be included in **Section 4.4, Water Quality**, of the Final EIS/EIR, rather than in the responses to comments portion of the Final EIS/EIR.

Response: The Final EIS/EIR, **Section 4.4, Water Quality**, has been further revised to include the substantive text from **Responses 13** and **15**. Please see the **Addendum** to the Final EIS/EIR for Revised **Section 4.4, Water Quality**. The **Addendum** is found in the Corps' Record Decision, **Appendix F**.

2.4.1 Water Quality -- Stormwater Runoff

The Regional Board states that the Final EIS/EIR should provide additional analysis on increases of stormwater runoff volume under the proposed Project. Absent this analysis, the comment states that the Final EIS/EIR is technically deficient under Part 4.D of the MS4 Permit. In addition, Regional Board states that the Final EIS/EIR did not provide adequate analysis of how the increased stormwater runoff volume under the proposed conditions would be mitigated in order to mimic pre-development hydrology. According to the Regional Board, absent this analysis and a plan to control runoff volume, **Section 4.4, Water Quality**, is technically deficient and the proposed development plan would be in violation of Part 4.D of the Los Angeles County MS4 Permit.

Response: Part 4.D of the Los Angeles County MS4 Permit requires that projects control post-development peak stormwater runoff discharge rates, velocities, and duration (peak flow control) in Natural Drainage Systems (*i.e.*, mimic pre-development hydrology) to prevent accelerated stream erosion and to protect stream habitat. The runoff model used to predict the average annual runoff volume for the impact analysis contained in the Final EIS/EIR is conservative as it does not account for any LID implementation and assumes a fixed volume reduction in vegetated BMPs based on studies in International BMP Database. The runoff volumes will be more precisely estimated in the Tier 2 and Tier 3 levels of analysis. In addition, the Geosyntec technical memorandum included in the Final EIS/EIR (**Appendix F4.4**) demonstrates that the performance standards contained in the Newhall Ranch Sub-Regional SWMP are equivalent to or exceed the LID goals and requirements of the DPW LID Ordinance and Manual when applied at the Specific Plan scale.

Potential impacts of the predicted increase in runoff volume are analyzed in two ways: (1) pollutant load modeling (**Section 4.4, Water Quality**); and (2) hydromodification impact analysis (**Section 4.2, Geomorphology and Riparian Resources**). The water quality impact analysis in the Final EIS/EIR shows that the increases in pollutant loads that result from the predicted increase in runoff volume would not adversely impact water quality or beneficial uses in the Project's receiving waters. (See EIS/EIR, **Section**

4.4, pp. 4.4-14.) The hydromodification control analysis in the Final EIS/EIR shows that stream erosion will not be accelerated and stream habitat will be protected, as required by the MS4 Permit. (See EIS/EIR, **Section 4.2**, pp. 4.2-10 and 4.2-11; 4.2-14 and 4.2-15; 4.2-43 through 4.2-48; and 4.2-50 through 4.2-101 (Alternative 2).)

2.5 Bacterial Indicators and Pathogens

The comment requests that information included in **Responses 17, 18, and 20** be included in **Section 4.4, Water Quality**, of the Final EIS/EIR, rather than in the responses to comments portion of the Final EIS/EIR.

Response: The Final EIS/EIR, **Section 4.4, Water Quality**, has been further revised to include the substantive text from **Responses 17, 18, and 20**. Please see the **Addendum** to the Final EIS/EIR for Revised **Section 4.4, Water Quality**. The **Addendum** is found in the Corps' Record of Decision, **Appendix F**. In addition, the proposed Project must comply with all regulatory requirements, including the future bacteria TMDL, which is implemented through the MS4 Permit.

In addition, the Regional Board states that studies conducted through the Los Angeles Region and southern California demonstrate that bacteria concentrations are two to three orders of magnitude greater in developed area than in natural areas, and that natural areas are unlikely to produce frequent exceedances or large exceedances of bacterial water quality standards.

Response: These statements are correct. The point of the clarification text in **Response 17** was to make it clear that the tributary watersheds are not natural areas, as these watersheds have been impacted by agricultural uses, oil extraction, and residential development (in the case of Chiquito Canyon) for many years. This clarification will be included in Revised **Section 4.4, Water Quality** (see Corps' Record of Decision, **Appendix F**).

The Regional Board states that the Final EIS/EIR's **Response 18** included data tables, which showed the geometric mean for coliform rather than the arithmetic average for wet weather data, and requested that these important improvements be included in the text of the Final EIS/EIR.

Response: **Response 18** will be included in the body of the revised Final EIS/EIR (**Tables 4.4-8, 4.4-9, and 4.4-10**). Please see the **Addendum**, which is found in the Corps' Record of Decision, **Appendix F**.

The Regional Board states that the section on bacterial indicators (**Response 20**) is dismissive of the genuine, well-documented, human health risk of exposure to water contaminated with high levels of fecal-indicating bacteria. The comment also notes that the recently-adopted bacteria Total Maximum Daily Load (TMDL) for the Santa Clara River establishes Waste Load Allocations based on allowable exceedance days for Reaches 3, 5, 6, and 7. The MS4 permit governs the discharge of pollutants from public storm drains that would be constructed and become operational in connection with development of the Newhall Land Specific Plan area, and those post-development discharges would have to comply with all the requirements incorporated into the MS4 Permit to be consistent with the TMDL once effective.

Response: The bacteria indicator discussion was not intended to be dismissive, but rather to acknowledge the documented health risk of exposure to water contaminated with pathogens. Revised **Section 4.4, Water Quality**, will include a discussion of the recently-adopted Santa Clara River Indicator Bacteria

TMDL. Please see the **Addendum**, which is found in the Corps' Record of Decision, **Appendix F**. The Project and any selected alternative would will comply with all applicable regulatory requirements, including the applicable requirements of the future Indicator Bacteria TMDL implementation plan, to be implemented through the Los Angeles County MS4 Permit.

2.6 Beach Replenishment

The Regional Board questions the estimated amount of sediment reduction in the Santa Clara River and its impacts to beach replenishment. In addition, the Regional Board asked how beach replenishment will be quantified.

Response: For convenience, **Response 23** from the Final EIS/EIR is quoted below, followed by supplemental information.

"Response 23

This comment addresses the issue of beach replenishment and/or sediment loading as a result of the proposed Project. As detailed in **Section 4.2** of the Draft EIS/EIR, the Santa Clara River exports an estimated 4.08 million tons of sediment per year from its mouth into the Santa Barbara Channel. In total, the RMDP and SCP would result in the net reduction of 9,966 tons of sediment per year (originating from the Project area tributaries and Project reach of the Santa Clara River), or approximately 0.25 percent of the total estimated sediment discharge to the Santa Barbara Channel, which would be a less-than-significant impact to local beaches. Although the impact is considered less than significant, the Draft EIS/EIR identified Mitigation Measure GRR-6, which specified that sediment from upland sources, such as debris basins and other sediment retention activities, would be redistributed in permitted upland and/or riparian locations, if available, along the Santa Clara River to reintroduce sediment for beach replenishment purposes. Implementation of Mitigation Measure GRR-6, should appropriate options be available, would further minimize any adverse effect of debris and sediment reduction on downstream beach erosion.

Sediment from upland sources, such as debris basins and other sediment retention activities, would be managed by the DPW. Potential management options for the sediment include delivery to a permitted waste disposal facility for use as cover material, placement in permitted upland or riparian locations along the Santa Clara River and/or tributaries, and/or transport and placement at designated beach sites for beach replenishment purposes. In regards to waste disposal facilities, Chiquito Landfill, a facility located within the Santa Clara River watershed, has indicated a need for large quantities of cover material and would have the capacity to receive the majority of the captured sediment.

Although no significant impact to local beaches were identified in the Draft EIS/EIR, sediment from upland sources, such as debris basins and other sediment retention activities, would be redistributed in DPW-designated and permitted upland or riparian locations along the Santa Clara River and/or tributaries to reintroduce sediment for beach replenishment purposes pursuant to Mitigation Measure GRR-6. Specifically, if deemed

appropriate, the sediment could possibly be delivered to local beaches as part of an approved beach replenishment program in accordance with applicable regulations and permit requirements. The Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) has developed a Coastal Regional Sediment Management Plan, Central Coast from Point Conception to Point Mugu (BEACON, 2009). The quantity, timing, and placement of Project-derived material would be conducted in accordance with the guidelines provided in the Coastal Regional Sediment Management Plan. Environmental review of specific projects recommended in the regional management plan would assess impacts associated with use of the material for the purpose of beach replenishment.

References:

The following references were used or relied upon, are available for public review upon request to the Corps or CDFG, and are incorporated by reference:

Beach Erosion Authority for Clean Oceans and Nourishment (BEACON), 2009. Coastal Regional Sediment Management Plan, Central Coast from Pt. Conception to Pt. Mugu, Final Report. January, 2009.

BonTerra Consulting, 2009. Draft Initial Study/Mitigated Negative Declaration, Del Valle Sediment Placement Site. Prepared for the County of Los Angeles Department of Public Works. February 2009."

Supplemental Information to Response 23 (Beach Replenishment)

To effectively estimate the potential impacts to beach replenishment in Ventura County (at the mouth of the Santa Clara River), the analysis presented an estimated net reduction of sediment due to the conversion of a portion of the Project site from a relatively natural, sediment producing portion, to one that is overlain with development and open area. In order to estimate this reduction, the analysis presented in Section 4.2, Geomorphology and Riparian Resources, of the Draft EIS/EIR derived the acreage of development resulting from the proposed Project and the related reduction in sediment-producing acres; and derived an annual, tons per acre sediment production rate that could be applied to the development acreage to determine the estimated net reduction in sediment loading to the Santa Clara River, and ultimately beach replenishment. In 2007, Stillwater Sciences conducted a study of Santa Clara River geomorphology (see referenced below), including sediment production. In that study, Stillwater estimated that approximately 1,171 tons of suspended sediment per square mile were produced in the upper Santa Clara River watershed, which terminates at the downstream end of the Project area.

Using Stillwater's entire watershed suspended sediment estimate of 4.08 million tons, a watershed-wide (1.624 square miles) sediment production rate of 2,512.3 tons per square mile was derived. Stillwater also evaluated historic debris basin activity within the Ventura County portion of the Santa Clara River watershed, which provided sedimentation information more related to the coarser hillslope-produced fraction of sediment than suspended sediment. Stillwater estimated that approximately 27.87 million tons of sediment in total is exported to the Santa Barbara channel annually, or 17,158 tons of sediment per square mile of the entire watershed. Using the same methodology described above to estimate the quantity of suspended sediment that would be reduced by each of the proposed Project alternatives, the total sediment reduction was derived based on the reduction in sediment-producing area. For the proposed

Project (Alternative 2), there would be a net reduction of 146,155 tons of sediment per year (originating from the Project area tributaries and Project reach of the Santa Clara River), or approximately 0.52 percent of the total estimated sediment discharge (suspended and coarse sediment load) to the Santa Barbara channel.

Below is a table that summarizes the extrapolated estimates from Stillwater, specific to the analysis presented in the Draft and Final EIS/EIR (Section 4.2. Geomorphology and Riparian Resources):

Santa Clara River Sediment Production			
Type of Sediment Produced	Estimate Sediment Yield (tons/sq.mi./yr)	Proposed Project Area 8.518 sq. mi. (tons/yr)	Percent Reduction of Total Santa Clara River Export (ton/hr)
Coarse Sediment (Ventura Co. Santa Clara River Debris Basins)	15,988	136,185	0.49%
Suspended Sediment (Warrick, Upper Santa Clara River Watershed)	1,171	9,973	0.04%
Total Sediment Reduction	17,158	146,155	0.52%
Total Santa Clara River Sediment Export		27,865,224	

As presented in this summary table for the proposed Project (Alternative 2), coarse sediment represents a substantially larger proportion of sediment exported to the Santa Barbara channel than does suspended sediment. These additional data will be incorporated into Revised Section 4.2. Geomorphology and Riparian Resources; however, the additional data does not change or alter the significance conclusions made in the Final EIS/EIR. (Please see the Corps' Record of Decision, Appendix F, for the Addendum to the Final EIS/EIR and Revised Section 4.2.)

Reference:

Stillwater Sciences. 2007. Santa Clara River Parkway Floodplain Restoration Feasibility Study: Assessment of Geomorphic Processes for the Santa Clara River Watershed, Ventura and Los Angeles Counties, California. Prepared by Stillwater Sciences for the California State Coastal Conservancy. This study is available for public review upon request to the Corps or CDFG and is incorporated by reference.

2.7 Sediment Management

The Regional Board focuses on **Response 23** to its prior August 25, 2009 comment letter (Letter 011) and questions Los Angeles County DPW efforts to manage sediment, including sediment loading due to fires. In addition, the Regional Board asks: (a) if a specific study will be developed to determine if sediment should be passed through the systems or placed at key sites for beneficial beach replenishment; (b) where sediment and/or debris removed from flood control structures will be placed; and (c) if a Maintenance Plan will be developed for the purpose of scheduling and determining capacity requirements for debris basins and flood control channels.

Response: As stated in **Response 23** in the Final EIS/EIR, "[s]ediment from upland sources, such as debris basins and other sediment retention activities, would be managed by the DPW." This response

then identified various potential management options for sediment, all of which remain viable. In response, the Regional Board questions DPW's sediment management, stating it is "challenged with finding locations for sediment placement for its current facilities," and "[t]here is currently not enough sediment placement space." The Regional Board also states the "transfer responsibility to a County-wide sediment management system which is not currently meeting its own requirements will not be adequate."

First, Los Angeles County DPW is the entity responsible for sediment management and planning for the Los Angeles County region, including the upper Santa Clara River watershed, and the County's sediment management program is not "inadequate."

As background, the Los Angeles County Flood Control Act (Act) established the Los Angeles County Flood Control District and empowered it to provide, among other things, flood protection within its boundaries. The Flood Control District is governed, as a separate entity, by the Los Angeles County Board of Supervisors. In 1985, the responsibilities and authority vested in the Flood Control District were transferred to the County of Los Angeles DPW. The DPW Flood Maintenance and Resources Divisions, respectively, oversee the District's maintenance and operational efforts. Every property owner in the County has a property tax assessment to fund the District's activities.

In July 2010, the Flood Control District held a regional sediment management workshop for various stakeholders at the County of Los Angeles DPW headquarters in Alhambra. This most recent effort is consistent with prior efforts taken by DPW, through the Flood Control District, to manage sediment in the region, including the Santa Clarita Valley.

Second, the proposed Project does not "transfer responsibility" to a county-wide sediment management system. As stated above, DPW is already vested with that authority and responsibility, and it is beyond the scope of any single proposed project to devise its own "custom" management system or develop a new or different county-wide sediment management system.

Third, DPW has had a county-wide strategy for sediment management in place since 2005, and DPW's most recent activities involve a two-part effort: (a) develop a short-term sediment management strategy for flood control facilities located in several fire areas within the County that are still undergoing recovery; and (b) update the County's long-term sediment management plan. DPW's efforts are discussed further below.

In June 2005 through March 2006, Los Angeles County DPW prepared a four-part strategy as part of the County's "Sediment Management Strategic Plan" (SMSP) that identified DPW's current sediment management practices, a 20-year projection of sediment management needs, alternative sediment disposal options, and an implementation plan. (See **Attachment F06-4** to these responses for the "Summary Report," dated June 5, 2005.) As stated in the SMSP Summary Report, the Project area is located within Sediment Management Area IV: Santa Clara River Watershed. (Summary Report, p. 3-18.) Area IV contains approximately 117 debris retention inlets with a total storage capacity of 147,000 cubic yards (cy), and six debris basins with a total average annual sediment production rate of 5,000 cy. (Summary Report, pp. 3-18 and 3-19.) DPW inspects the debris facilities on an annual basis and generally maintains the debris basins when the volume of sediment reaches 25 percent of the design capacity (approximately once every five years). Approximately 10 to 20 percent of the smaller debris retention inlets are cleaned on an annual basis. DPW estimates that existing and future development in Area IV will generate 250,000 cy of sediment in the next 20 years (12,500 cy/yr). (See Summary Report, p. 3-19.)

DPW is in the process of updating its SMSP because its sediment placement sites are approaching capacity due to the tremendous amounts of debris generated in the aftermath of the 2009 Station Fire. The updated SMSP, which is scheduled to be completed in June 2012 (before development of Newhall Ranch begins to generate sediment), is intended to meet the County's long-range sediment management needs for 2012 to 2032. (See **Attachment F06-5** to these responses for a copy of the Long-Term Sediment Management Plan Slide Presentation, dated July 14, 2010.)

DPW also has identified a short term strategy for the years 2010/2011 - 2013/2014 that will fully utilize existing County Sediment Placement Sites (SPS), maximize use of existing landfills, utilize gravel pits agreements, and other disposal strategies. In the aftermath of the 2007 Buckweed, Ranch, and Magic Fires in the Santa Clarita Valley, DPW anticipates sediment removal volumes of 5,800 cy in 2010/2011, 5,800 cy in 2011/2012, 2,000 cy in 2012/2013, and 2,000 cy in 2013/2014, primarily utilizing the Chiquito Canyon Landfill. The approximately 16,000 cy of anticipated sediment volume for the entire Santa Clarita Valley over this 2010-2014 period represents 0.4 percent of the estimated county-wide short term sediment removal volumes. (See **Attachment F06-6** to these responses for a copy of the Short-Term Sediment Management Plan Slide Presentation, dated July 14, 2010.)

The Project area will be included in DPW's updated SMSP. The proposed drainage concept for the RMDP area was prepared in accordance with DPW flood control criteria to include five debris-carrying soft-bottom channels (San Martinez Grande, Chiquito, Potrero, Long, and Lion Canyons), one debris basin, and approximately 70 debris retention inlets maintained by the County. These facilities would be constructed by the subdivider and turned over for long-term maintenance by DPW as the Project builds out. Funding for maintenance of these facilities is ensured through Flood Control District property tax assessments. It is estimated that at build-out, the debris basins and debris retention inlets in the RMDP area would generate approximately 8,638 cy of annual sediment removal volume, which would be contributed to Area IV annual sediment generation (see **Attachment F06-7** to these responses for a copy of the Newhall Ranch Debris Control Summary Table). With DPW's sediment management strategy in place, the proposed Project would not result in significant adverse impacts to water quality.

In addition, the Regional Board's three questions related to sediment management are addressed.

First, the Regional Board asked whether a specific study would be developed to determine if sediment should be passed through the systems or placed at key sites for beneficial beach replenishment?

In response, the Draft LEDPA soft-bottom channels (Chiquito, San Martinez Grande, Lion, Long, and Potrero Canyons) are all designed to pass sediment through the Project site to the Santa Clara River for beach replenishment using Los Angeles County DPW Hydrology and Sedimentation Manuals (2006); no specific study was developed, and no specific study is needed as the design accounts for this form of sediment management. Only debris basins and debris retention inlets upstream of closed storm drains would retain sediment on site.

Second, the Regional Board requested information on where sediment and/or debris removed from flood control structures would be placed.

In response, the Final EIS/EIR and **Response 23** identified three options for sediment disposal: (1) Chiquita Canyon Landfill for daily cover or general disposal; (2) future DPW-permitted and designated upland/riparian locations along the Santa Clara River and/or tributaries; and (3) a designated beach

nourishment program, such as the "Beach Erosion Authority for Clean Oceans and Nourishment" (BEACON), or a similar program developed by Los Angeles County. DPW's long-term sediment management plan update also anticipates incorporating new strategies to meet sediment management needs for the next 20 years. These strategies are anticipated to include the utilization of existing sediment placement sites, and the development of new sites, including landfills in and outside Los Angeles County, gravel mine areas, and other site options. The strategies will involve key stakeholders, such as regulatory agencies, other agencies, cities, landfill owners and managers, and sand and gravel companies. DPW has begun the process of establishing a sediment placement site immediately adjacent to Newhall Ranch on County-owned property in Chiquito Canyon. This proposed sediment placement site would have a potential capacity of 350,000 cy.

Third, the Regional Board asked whether a maintenance plan would need to be developed to schedule and determine capacity requirements for debris basins and flood control channels.

In response, the Final EIS/EIR and **Response 23** indicated DPW would own and have maintenance responsibility for the on-site debris and flood control facilities, including capacity requirements and maintenance scheduling. DPW is currently updating its long-range sediment management program to address these issues on a regional level. As stated above, these issues are beyond the scope of any single project, and are best managed by DPW, the local entity vested with the responsibility for sediment management and planning in the Los Angeles County region, including the upper Santa Clara River watershed.

2.8 Other Issues

The comments address potential Project impacts resulting from hydrogeomorphic changes downstream in Ventura County, which could impact the State Coastal Conservancy's (Coastal Conservancy) Santa Clara River Parkway project in Ventura County; and request that the "final project" satisfy the mitigation requirements set forth in the 2008 Mitigation Rule promulgated by the Corps. These comments are addressed below.

2.8.1 Santa Clara River Parkway Project

The comments describe the Conservancy's Santa Clara River Parkway project as "immediately downstream of the Newhall Ranch proposed development."

Response: Based on a review of the "Santa Clara River Parkway Floodplain Restoration Feasibility Study" prepared for the Coastal Conservancy by Stillwater Sciences, dated July 2008 (see **Attachment F06-8** to these responses for a copy of the Feasibility Study), the Santa Clara River Parkway project seeks to ameliorate historical impacts in the lower Santa Clara River and conserve existing riparian habitats by acquiring and restoring existing habitat and flood-prone property from "willing sellers." (Feasibility Study, p. v.) The Feasibility Study was undertaken to assist with the acquisition, management, and eventual restoration of lands within the Parkway project. According to the Feasibility Study, page 1-1, the "primary goal of the Parkway is to create, protect, and restore 25 miles of continuous River and floodplain corridor from the mouth of the Santa Clara River to the Sespe Creek confluence," which is approximately 13.4 miles from the western boundary of the Project site at the Los Angeles County/Ventura County line. (Feasibility Study, p. 1-1.)

The Parkway project extent encompasses a "25-mile reach of the lower river from the mouth to the Sespe Creek confluence." (Feasibility Study, p. 1-4, Figure 1-2.) However, the Feasibility Study included both the Parkway project extent, as defined, as well as "the reach from Sespe Creek upstream to the Los Angeles/Ventura County line." (*Id.*) The Feasibility Study defined its "area of analysis" by reference to the extent of the 500-year floodplain, and stated this area of analysis "includes the lower portions of the three major tributaries: Piru, Sespe, and Santa Paula creeks." (*Id.*) The eastern-most portion of this "area of analysis" is the Piru Creek confluence, which is approximately 4.4 miles from the Project boundary at the Los Angeles County/Ventura County line.

In describing the wide variety of physical and ecological conditions that occur in the River, the Feasibility Study determined "it was useful to subdivide the lower Santa Clara River into 12 reaches (numbered from downstream to upstream)," based on physical, biological, and other criteria. (Feasibility Study, p. 1-4, Table 1-1.) The eastern-most, upstream reach is identified as "Reach 11." (Feasibility Study, p. 1-7, Table 1-1.) Reach 11 is approximately 4.4 miles in length from its start point in the vicinity of the Piru Creek confluence to its end point at the Los Angeles County/Ventura County line. (*Id.*) Much of the land within this reach of the River Corridor is owned by the Project applicant (Newhall), and the applicant is not currently a "willing seller" of its Ventura County landholdings within Reach 11, and one of the important predicates of the Parkway project is to acquire property within the River Corridor from "willing sellers." (Feasibility Study, p. v.) The Conservancy has acquired property within Reach 11 just upstream of the Piru Creek confluence, 3.5 miles west of the County line. Based on a Draft EIS/EIR technical report, the furthest extent of downstream RMDP impacts under the 100-year storm event is approximately 3.5 miles west of the Project boundary. Therefore, the Draft LEDPA does not result in impacts to the Santa Clara River Parkway project properties. This determination is also illustrated on **Attachment F06-9**, which is a figure depicting the State Coastal Conservancy's Parkway projects in relation to the RMDP site boundary. (See **Final EIS/EIR**, Volume IV, Appendix 4.1, for a copy of the Revised PACE Report, dated June 2010 (Santa Clara River); and see **Responses 2.1 through 2.3** to letter from Ventura County Watershed Protection District, dated August 2, 2010 (Letter F11), and **Response 2.2** to letter Ventura County Watershed Protection District, dated August 2, 2010 (Letter F12.)

2.8.2 2008 Mitigation Rule

The comment states that the "final project" will need to include mitigation requirements in accordance with the 2008 Mitigation Rule.

Response: As described in the Final EIS/EIR, Volume III (June 2010), **Response 2** to the letter from USEPA, dated August 24, 2009 (Letter 004), the 2008 Mitigation Rule does not apply to the proposed Project. However, as part of the project-level sub-notification process, each mitigation project would include the 12 components identified in the 2008 Mitigation Rule.

This commitment is reflected in the Final Mitigation and Monitoring Plan, which is included in the final 404(b)(1) alternatives analysis.

2.8.3 "Reconstructed" Drainage Channels

The Regional Board states that if the mitigation plan in the "final project" includes "reconstructed" drainage channels, then the Final EIS/EIR will need to include evidence ensuring "the replacement of functions and values of the pre-existing natural channels."

Response: As described in the Final EIS/EIR, "reconstructed" drainage channels would be designed and revegetated to replace the functions and services of pre-existing natural channels. The basis of design for the five major tributary drainages that would be modified under the Draft LEDPA is summarized below (excerpted from pages 4.2-70 and 4.2-72 of the Final EIS/EIR):

"The basis of design for the five major tributary drainages that would be modified (Chiquito, San Martinez Grande, Lion, Long, and Potrero) is such that the channels would be designed to be in geomorphic equilibrium in terms of channel stability, sediment transport, and flow conveyance under future conditions. The channel and floodplain would be designed to meet the following criteria:

- Geomorphic stability -- The channel would not aggrade with sediment or erode its banks or bed substantially. The bankfull² channel will be sized for the dominant² (channel forming) discharge. Sizing would be based on the proposed channel slope and the modeled post-development discharge conditions.
- Flood conveyance -- The floodplain would convey the capital flood (Q_{cap}) (discharge resulting from a hypothetical four-day storm with a 50-year return period falling on a saturated watershed with debris from a wildfire) with a minimum of three feet of freeboard, and meet DPW standards for flood channels.
- Ecological function -- The channel and floodplain would support a combination of riparian habitat, coastal sage scrub, oak woodland, *etc.*, as appropriate (see **Section 4.5, Biological Resources**, of this EIS/EIR for details on riparian habitat types and locations). Grade stabilizer structures, culverts, and other hydraulic structures would be designed to accommodate wildlife requirements.
- Hydromodification -- The combined urban runoff management program, in conjunction with the channel design, would address potential "hydromodification" impacts resulting from development of the RMDP and SCP areas. The channel would not aggrade or generate excess sediment from erosion or create a larger than natural downstream impact from sedimentation associated with hydrograph modification.
- Low maintenance -- The channel and associated structures would require minimum maintenance. The channel and floodplain would not require sediment removal or vegetation clearance. Following construction, a monitoring and management plan would be implemented to evaluate compliance with the basis of design criteria to ensure that the engineered channels function as intended (see Mitigation Measure GRR-7)."

² The design approach assumes dominant discharge is equivalent to bankfull flow for purposes of channel design. Using continuous rainfall-runoff simulation for the Newhall Ranch watersheds, Geosyntec (2008) calculated the dominant discharge; this corresponded closely with the 2-year recurrence interval storm event.

Further, the Final Mitigation and Monitoring Plan outlines the functions and services to be established, restored, enhanced, and/or preserved (Section 2.2) in relation to the impacts (Section 1.6) and monitoring performance of target functions and services (Section 6.2). The Final Mitigation and Monitoring Plan includes a comprehensive description of the compensatory mitigation program and is provided in the **Addendum** to Final EIS/EIR. Please see the Corps' Record of Decision, **Appendix F**, for the **Addendum**.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

AUG 24 2009

Colonel Thomas H. Magness
District Engineer, Los Angeles District
U.S. Army Corps of Engineers
PO Box 532711
Los Angeles, California 90053-2325

Subject: Public Notice (PN) 2003-01264-AOA for the proposed Newhall Ranch Management and Development Plan, Los Angeles County, California

Dear Colonel Magness:

This letter is in response to your May 1, 2009 PN that describes the proposed Newhall Ranch Management and Development Plan for portions of the Santa Clara River and several adjacent tributaries, near the city of Santa Clarita, Los Angeles County, California. According to the PN, the applicant proposes to discharge dredged or fill material into approximately 82.3 acres of waters of the United States across the 12,000 acre project site.

The May 1, 2009 PN also provided notice of the publication of the Draft Joint Environmental Impact Statement and Environmental Impact Report (DEIS/DEIR) for the proposed project, pursuant to the National Environmental Policy Act (NEPA). EPA will provide comments on the DEIS in separate correspondence. The following comments were prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines (40 CFR 230) promulgated under §404(b)(1) of the Clean Water Act (CWA). Our detailed comments on the project are enclosed.

Although the DEIS considered six separate alternatives to satisfy the requirements of NEPA, the PN did not provide information on how impacts associated with the proposed project have been avoided, minimized and compensated as required by 33 CFR 332.4(b)(1). Furthermore, the applicant has not yet prepared an 404(b)(1) Alternatives Analysis as required at 40 CFR 230.10(a). Therefore, we cannot determine whether the proposed discharge complies with the restrictions as specified in the Guidelines.

The Santa Clara River is Southern California's longest free-flowing river. The Santa Clara is home to 12 federally endangered plant and animal species and another 25 species of special concern. The river also supports an aquifer that provides drinking water to half of the residents in the Santa Clarita Valley. For these reasons, we are defining the Santa Clara River as an aquatic resource of national importance. Several of the drainages in the Newhall Ranch project area are significant tributaries to the Santa Clara River that provide important watershed functions (e.g., aquatic habitat, water and sediment supply

and retention, and groundwater recharge). Modifications of these tributaries have the potential to cause adverse impacts to the Santa Clara River. Given the available information and the potential impacts to the Santa Clara River and its tributaries, EPA has determined that the project, as presently proposed, may result in significant and unacceptable impacts to aquatic resources of national importance and therefore recommends denial of the project. This letter follows the field level procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of Army, Part IV, paragraph 3(a) regarding §404(q) of the CWA.

Thank you for the opportunity to provide comments on this project. We look forward to working with the Los Angeles Corps District and the applicant to resolve the important environmental issues concerning the proposed project. If you wish to discuss this matter further, please call me at (415) 972-3572, or have your staff contact David W. Smith, Chief of our Wetlands Office, at (415) 972-3464.

Sincerely,

 24 Aug. 2009
Alexis Strauss, Director
Water Division

Cc:

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DETAILED PROJECT COMMENTS

I. Project Description

The Newhall Ranch Project is a master-planned development encompassing approximately 12,000 acres along the Santa Clara River (“the River”) in unincorporated Los Angeles County. The applicant proposes to develop approximately 2,550 acres of the site for residential, commercial and industrial purposes. The applicant’s proposed project includes the construction of 22,610 homes (in four separate villages), seven schools, a golf course, and a water reclamation plant.

The entire project area supports approximately 636 acres of waters of the United States, including 251 acres of wetlands, according to the preliminary jurisdictional determinations performed by the Corps to date. The majority of the jurisdictional waters on the site are located along the River. The site also includes several major tributaries that flow from the steep headwater areas down through the project to the River. As proposed by the applicant, the project would result in the destruction of approximately 82.3 acres of waters from direct discharges of fill material. Nearly 95% of the permanent impacts will occur in the ephemeral tributaries and small drainages that flow through the site. To create development areas, fill material from the surrounding upland areas would be placed into the valleys and canyons. New drainages and channels with grade control structures would be recreated on top of this fill material. Additionally, 59,845 linear feet of drainages would be converted to underground storm drain. Excluding the Salt Creek Open Area, the applicant proposes to fill approximately 79% of the natural tributaries on the project site.

II. Project Purpose

A key issue is whether the Corps’ adoption of applicant’s project purpose – implementation of the Newhall Ranch Resource Management and Development Plan (RMDP) – as the overall project purpose will allow it to adequately consider practicable alternatives to the Project design under CWA section 404(b)(1).

EPA understands the Corps has not yet concluded its alternatives analysis pursuant to the CWA Section 404(b)(1) guidelines, and that the alternatives analysis is to be completed concurrently with the EIS/EIR on the broader Newhall Ranch Specific Plan (Specific Plan), of which the RMDP is described as a component, and will be provided as an appendix in the Final EIS/EIR.¹ EPA nevertheless believes it useful to provide our comments on the overall project purpose at this stage in the permit review process because the Corps acknowledges in its PN that this NEPA alternatives analysis will “provide the basis for the 404(b)(1) alternatives analysis.”² Thus, EPA anticipates the

¹ RMDP-SCP EIS/EIR, (Executive Summary) ES-12.

² PN at 5 (“To satisfy the requirements of NEPA and provide the basis for the 404(b)(1) alternatives analysis, a total of six alternatives are being considered In consideration of the 404(b)(1) Guidelines, the five project alternatives were designed to increase the level of avoidance and minimization of impacts to waters of the United States, including wetlands.”)

Corps' adoption of the overall project purpose in this EIS/EIR will likely be consistent when the Corps completes its 404(b)(1) analysis.

Pursuant to the 404(b)(1) Guidelines, there is a rebuttable presumption that practicable alternatives that do not involve special aquatic sites or are not water dependent are presumed to be available and "presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise."³ The Corps' burden in finding the least environmentally damaging practicable alternative under the CWA Guidelines is "heaviest" for non-water dependent projects planned for a special aquatic site, such as a wetlands area. Because of this heavy presumption, the Corps may not issue a 404 permit unless the applicant, with independent verification by the Corps, provides detailed, clear and convincing information proving that an alternative with less adverse impact is "impracticable."

The Corps is required to take the applicant's purpose into adequate regard, and may consider local plans, such as the Specific Plan approved by the Los Angeles County Board of Supervisors in 2003, in its decision-making. On the other hand, the Corps must ensure that the overall project purpose is not so narrow that it constrains the alternatives analysis performed pursuant to the 404(b)(1) Guidelines.

From an overall review of the planning documents the applicant's overall project purpose may best be described as development of a master-planned community.⁴ As such, it is not water dependant but does contain special aquatic sites, e.g., the alkali marsh areas in Potrero Canyon.⁵ The EPA thus encourages the Corps to steer the project toward alternatives that do not involve discharges into these special aquatic sites. Currently, all of the applicants' build alternatives would impact special aquatic sites to some degree. Only Alternative 7 shows avoidance of most impacts.

EPA is concerned the DEIS relies on an overall project purpose that is narrowed to a development consistent with implementation of the RMDP.⁶ While the RMDP is described as a "a conservation, mitigation, and permitting plan for sensitive biological resources",⁷ the applicant acknowledges that "[t]he RMDP also includes development-related infrastructure projects in the Santa Clara River and its tributary drainages that are

³ 40 C.F.R. § 230.10(a)(3).

⁴ RMDP-SCP EIS/EIR, ES-10 ("The [RM&D Plan] would allow for the build-out of about 5.5 million square feet of commercial uses on 258 acres, and the development of approximately 643 acres devoted to uses such as community parks, neighborhood parks, a golf course, a community lake, new elementary, junior high and high schools, a library, electrical substation, fire stations, and a 6.8 million gallon per day water reclamation plant.")

⁵ RMDP-SCP EIS/EIR, 4.6-8, 11.

⁶ RMDP-SCP EIS/EIR, ES-11. ("The overall purpose/objective of the Project is to implement the approved Newhall Ranch Specific Plan, and thereby help to meet the regional demand for jobs and housing in Los Angeles County; and, at the same time, implement the [RM&D Plan] to address the long-term management of sensitive biological resources and develop infrastructure needed to implement the approved Specific Plan.") (emphasis added).

⁷ RMDP-SCP EIS/EIR, ES-1.

needed to implement the approved Specific Plan.”⁸ The DEIS further provides that “[i]f the [RMDP] is approved ... development associated with the approved Specific Plan would be facilitated.”⁹ Consequently, EPA believes that a more accurate description of the overall project purpose would encompass these broader plans as set forth in the Specific Plan. A broader statement of purpose, such as “construction of a large scale, high density housing and commercial project” might suffice.

III. Mitigation Sequencing

The basic premise of the 404 permitting program is that no discharge of dredged or fill material into waters of the United States shall be permitted if (1) a practicable alternative exists that is less damaging to the aquatic environment, or (2) the discharge would cause the nation’s waters to be significantly degraded. In order for a project to be permitted, it must be demonstrated that, to the extent practicable, steps have been taken to avoid impacts to wetlands and other aquatic resources, potential impacts have been minimized, and compensation will be provided for any remaining unavoidable impacts. This process is commonly referred to as the mitigation sequencing requirement of the 404 regulatory program.

Avoidance is the first step in the sequencing process by which the Corps determines whether or not the applicant’s proposed project is the least environmentally damaging practicable alternative (LEDPA). The Guidelines state:

...no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem so long as the alternative does not have other significant adverse environmental consequences.

Seven alternatives were analyzed in the DEIS jointly issued by the Corps and the California Game and Fish Department (CDFG), with varying levels of avoidance and impacts analyzed in accordance with the NEPA. The applicant’s preferred NEPA alternative (Alternative 2) in the EIS would result in the greatest amount of permanent impacts (82.3 acres) and does not appear to follow the sequencing process. EPA strongly believes that further avoidance of waters of the United States is necessary prior to formulation of the LEDPA.

IV. 404 (b)(1) Alternatives Analysis & Determination of the LEDPA

Although both NEPA and Section 404 require a range of alternatives be considered and analyzed during the environmental process, the requirements of the different regulations differ slightly. NEPA regulations require that an EIS rigorously explore and objectively evaluate “all reasonable alternatives,” while the 404(b)(1) Guidelines require the consideration of “practicable” alternatives. The Guidelines define “practicable” as available and capable of being done, taking into account cost, existing technology, and

⁸ RMDP-SCP EIS/EIR, ES-6.

⁹ RMDP-SCP EIS/EIR, ES-9.

logistics. Although the DEIS examined five additional project alternatives that had permanent impacts ranging between 11.4 acres in Alternative 7 to 71 acres in Alternative 3, it is unclear at this point whether these alternatives are “practicable” under Section 404.

From discussions with your staff, we understand that the applicant has not finished preparing the 404(b)(1) Alternatives Analysis for the proposed project. It has long been the position of EPA Region 9, that in order for the analysis of practicable alternatives under Section 404 to serve its intended purpose as a planning and screening tool, the analysis must be applied by potential permit applicants as early in the planning phases of their projects as possible. EPA would like the opportunity to review and provide comments on the 404(b)(1) alternatives analysis when this document becomes available.

The NEPA process includes alternative development and analysis leading to the identification and selection of a preferred alternative. However, the NEPA preferred alternative must also be considered the LEDPA for the Corps to proceed with authorization under the CWA. The LEDPA, as defined in 40 CFR Part 230.10(a), is the alternative with the least impacts to the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

V. Aquatic Resources of National Importance

The Santa Clara River is an Aquatic Resource of National Importance (ARNI) because it is Southern California’s longest free-flowing river and is home to 12 federally endangered plant and animal species plus another 25 species of special concern. The River also supports an aquifer that provides drinking water to half of the residents in the Santa Clarita Valley.

The impacts to the River may be significant and unacceptable. First, the applicant’s proposed Project alternative (as provided in the DEIS) would result in a net loss of 157 acres of the River’s FEMA 100-year floodplain (as well as nearly 4.43 acres of permanent impacts to the River itself associated primarily with bridge crossings).¹⁰ This would result partially due to major fill to raise existing floodplain elevations out of the designated FEMA floodplain. DEIS significance criteria for flooding focuses on the potential for the project alternatives to increase flood hazards and does not include impacts to the River’s floodplains themselves. The Presidents’ Floodplain Management Executive Order 11988¹¹ was adopted to avoid impacts associated with the occupancy and modification of floodplains. The Order specifically states that federal agencies shall provide leadership to preserve the natural and beneficial values of floodplains. While still only in draft form, a newly proposed Floodplain Management Executive Order states that federal agencies must strengthen their commitment to protecting and restoring the

¹⁰ RMDP-SCP EIS/EIR 4.6-51.

¹¹ Executive Order 11988 Floodplain Management (42 FR 26951), May 24, 1977

natural resources and functions of floodplains.¹² It also includes a provision that federal agencies “shall avoid placing fill in the floodplain to achieve flood protection to the extent practicable.” The EPA considers the loss of 157 acres of FEMA floodplain to be inconsistent with the intent of the adopted and draft Floodplain Management Executive Orders.

Second, the applicant’s proposed Project alternative poses significant and potentially unacceptable impacts to the River as result of proposed impacts to the River’s ephemeral and intermittent streams and tributaries, which provide a wide range of functions that are critical to the health and stability of the River. These tributaries provide hydrologic connectivity within the watershed, linking ephemeral, intermittent, and perennial stream segments, thereby facilitating the movement of water, sediment, nutrients, debris, fish, wildlife, and plant propagules throughout the Santa Clara watershed. In general, the processes that occur during ephemeral and intermittent stream flow include dissipation of energy as part of natural fluvial adjustment, and the movement of sediment and debris. Ephemeral and intermittent streams are responsible for a large portion of basin ground-water recharge in arid and semi-arid regions such as this one through channel infiltration and transmission losses. These stream systems contribute to the biogeochemical functions of the River and its watershed by storing, cycling, transforming, and transporting elements and compounds.¹³

Ephemeral and intermittent streams also support a wide diversity of plant species, and serve as seed banks for these species. Because vegetation is more dense than in surrounding uplands, ephemeral and intermittent streams provide habitat, migration pathways, stop-over places, breeding locations, nesting sites, food, cover, water, and resting areas for mammals, birds, invertebrates, fish, reptiles and amphibians. Here, as in other arid and semi-arid regions, the variability of the hydrological regime is the key determinant of both plant community structure in time and space and the types of plants and wildlife present in the ephemeral and intermittent streams at issue, as well as the River itself.

Ephemeral and intermittent streams in arid and semi-arid regions have distinctly different characteristics from perennial streams that are in wetter, more humid (mesic to hydric) environments. These complex systems have developed in a climatic regime of wide fluctuations of precipitation, ranging from drought to flood. Anthropogenic uses, such as urbanization, superimposed on that climatic regime can exacerbate or ameliorate their effects on soils and vegetation, and may affect hydrologic and ecological functions throughout the watershed. Stability and resiliency to disturbance are important for ecological integrity, but because of the deficiency of water, terrestrial arid and semi-arid region ecosystems do not recover quickly from human-imposed disturbance. Thus, EPA

¹² See the Environment & Energy Publishing, LLC website for a copy of the proposed draft Executive Order 11988 found online at:

http://www.eenews.net/public/25/11835/features/documents/2009/07/21/document_gw_01.pdf

¹³ See Levick, L., J. Fonseca, D. Goodrich, M. Hernandez, D. Semmens, J. Stromberg, R. Leidy, M. Scianni, D. P. Guertin, M. Tluczek, and W. Kepner. 2008. *The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest*. U.S. EPA and USDA/ARS Southwest Watershed Research Center, EPA/600/R-08/134, ARS/233046, 116 pp.

would expect the amount and scope of permanent fill proposed by the applicant to significantly impact the hydrologic and ecological functions of the ephemeral and intermittent streams at issue, as well as the River itself.

Relatively intact low-order ephemeral streams with adequate buffers, such as the ones proposed to be filled by the applicant, perform a diversity of hydrologic, biogeochemical and habitat support functions that directly affect the integrity and functional condition of higher-order waters downstream, such as the River. Collectively, ephemeral and intermittent tributaries serve as the filtering headwaters for the primary sources of drinking water, and their coarse beds allow water infiltration that recharges groundwater aquifers. Healthy ephemeral waters with characteristic plant communities control rates of sediment deposition and dissipate the energy associated with flood flows to, e.g., downstream waters such as the River. The loss of these waters results in increased need for costly and often environmentally undesirable flood control facilities (such as the one proposed by the applicant for the River), as well as the increased need for drinking water and wastewater treatment infrastructure.

The goal of the CWA is to maintain and restore the physical, chemical, and biological integrity of the nation's waters. Ephemeral streams constitute a critical component of stream, river, and wetland systems throughout the United States, especially in the arid west where ephemeral systems are the primary characteristic of many watersheds. These systems provide important services, both to public health and the economy that our region depends upon. Impacts to ephemeral streams have largely been either unmitigated or mitigated out-of-kind, and a significant loss of headwater streams in many watersheds of the arid southwest has incrementally occurred. Ephemeral streams are, more than ever, of critical value regionally, and their support of human health and the economies of the west underscore their national importance.

In short, the Newhall Ranch project, as it is currently described in the PN, poses significant and unacceptable impacts to the River because it permanently removes much of the River's floodplain, and because the Project will both cause and contribute to the significant degradation and/or elimination of functions and values of the reach of the River that flows through the Project area by permanently impacting a significant portion of its tributaries, including Potrero Canyon, the impacts to which are discussed specifically below. The range and severity of environmental consequences resulting from the Newhall Ranch project to the River's aquatic environment are substantial and unacceptable and are contrary to the goals of the CWA.

VI. Potrero Canyon

EPA is particularly concerned about the applicant's proposed development and impacts to Potrero Canyon, a River tributary, where 40% (32.73 acres) of the permanent impacts to aquatic resources from the proposed project will occur. According to the DEIS, Potrero Canyon contains 37.9 acres of waters of the United States including 6.52 acres of wetlands. The wetlands in Potrero Canyon include a rare, difficult to replace cismontane alkali marsh located in the lower portion of the Canyon. The 404 regulations establish a

rebuttable presumption that, “where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem.”

Under the applicant’s preferred proposed project, nearly all of stream channel that flows through Potrero Canyon will be placed under 6 to 25 feet of fill material and a new channel will be constructed on top of this material. The new channel will be bound by 32,530 linear feet (lf) of buried bank stabilization and will include 98 grade control structures and 5 bridge crossings. In addition, 10,918 lf (7.15 acres) of the stream in the headwater areas will be converted to underground storm drain. The wetland at the downstream end of Potrero Canyon would likely become hydrologically isolated from the active stream system and would likely not persist due to this interruption.

According to the results from the Hybrid Assessment of Riparian Condition (HARC) that was conducted on 57 stream reaches and across the study area (including the Santa Clara River), Potrero Canyon had the highest average HARC total score (.82) of all the major drainages (including the Santa Clara River). This score is even higher than the Salt Creek Open Area that had been used as a reference site for many of the geomorphic assessments. Using the post-project assumptions that were developed for the HARC, after implementation of the applicant’s proposed project, Potrero Canyon will lose 15.86 HARC Average Weighted Total Score Units. Although the Corps has proposed to mitigate for this loss elsewhere in the project area (at Salt Creek and/or along the Santa Clara River), under the mitigation ratios specified in Mitigation Measure BIO-2 of the DEIS, the CDFG would require 74.91 acres of mitigation for the impacts to Potrero Canyon. After construction of the new channels, there would remain a deficit of 52.8 acres that would be mitigated through creation, preservation, enhancement of jurisdictional areas at an off-site location.

EPA strongly believes that further avoidance is necessary in Potrero Canyon since it will be difficult, if not impossible to replace and mitigate for both the lost cismontane alkali wetland and the ephemeral tributary in this area. The Corps has not yet provided the science or evidence of prior experience that is required to support the conclusion that the new streams would replace the functions and values of the wetlands and tributaries proposed to be filled and buried.¹⁴ We are also concerned about the sustainability of creating ephemeral streams on top of fill material, since the survival of the riparian vegetation may not persist as it will be further separated from existing groundwater supplies. Most importantly, we are concerned about the impacts to the River caused by the potential loss of these special aquatic sites in Potrero Canyon for the reasons discussed in Section IV above.

¹⁴ Ohio Valley Environmental Coalition v. USACOE, 479 F. Supp. 2d 607, 65 ERC 1234 (S.D.W.V. 2007) (Corps was arbitrary and capricious to conclude that mitigation plan that would replace filled stream with artificial streams called for a finding of no adverse impacts where Corps had no science or prior experience to support conclusion that artificial streams constructed out of abandoned sediment ditches would replace the functions and values of the headwaters systems being destroyed)

VII. Summary

Prior to granting a permit pursuant to Section 404 of the CWA, the Corps must determine that the project complies fully with EPA's 404(b)(1) Guidelines and the project is not contrary to the public interest.

At this point, there is not sufficient information to determine whether the proposed discharge complies with the substantive requirements in the regulations related to alternatives analysis, water quality, endangered species, significant degradation, and/or mitigation. Based on the information presented to date, the applicant has not demonstrated that the project complies with any of the restrictions to discharges under the Guidelines.

Once the applicant completes a 404(b)(1) alternatives analysis for the proposed project, EPA would like the opportunity to review and provide comments on this document. We must therefore reaffirm our conclusion that there is presently insufficient information to make a finding of compliance, and we urge you to deny the application.

Dennis Bedford,
California Department of Fish and Game
Aaron Allen,
US Army Corps of Engineers

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Section 401 of the Clean Water Act requires that we certify that the project activities will not cause or contribute to a violation of the state water quality standards. At this time, we cannot conclude that the development of the 12,000-acre Newhall Ranch Specific Plan area (Specific Plan area) would not result in an unacceptable degradation of water quality. In addition, we do not find that the potential significant impacts have been minimized to the fullest degree possible.

Our review of the Final EIS/EIR, indicates that the U.S. Army Corps of Engineers (ACOE) and California Department of Fish and Game (CDFG) have not fully considered our comments in the development of the LEDPA. Our comment letter of August 25, 2009, included specific comments regarding components of each Alternative which would meet the goals and water quality objectives of the Regional Board. We recognized that the preferred Alternative 2 should not have been designated as the LEDPA and that the Alternative which would best meet all avoidance and minimization requirements, would be Alternative 7.

The CWA Section 404(b)(1) Guidelines require the LEDPA to be selected based on avoidance, minimization, and mitigation of unavoidable impacts to waters. Basically, the proposed LEDPA has been developed as a modified version of Alternative 3. The Regional Board *does not* concur that the Draft LEDPA has incorporated many of the concerns raised with our previous comments, including the following:

Hydromodification

The Regional Board submitted specific comments for each of the major tributaries to Santa Clara River, in which one or more alternatives should be considered due to hydromodification impacts. There was not a substantive technical response to each of these comments.

Response 6 Potrero Canyon

The substantive part of the response was one sentence: "The Santa Clara River bridge design elements of Alternatives 3 and 4 (elimination of Potrero Bridge) have been incorporated into the Draft LEDPA."

The cismontane alkali marsh is preserved in the Draft LEDPA, and the impacts from a bridge construction on Potrero Canyon Road are avoided.

However, the response provided is not adequate because it does not discuss the avoidance of permanent impacts in Potrero Canyon at all. In addition, we note that while in the Draft LEDPA the amount of 'drainage converted into storm drain' is less than in Alternative 3, the overall 'drainage modified' or 'drainage converted into storm drain' is



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greater in the Draft LEDPA and the resulting preserved drainage is less. How does this comport with the avoidance of impacts in Portrero Canyon?

Response 7 - San Martinez Grande

There is no substantive response to this comment. The response does not in any way address the comment made: San Martinez Grande area and how this Alternative could have been incorporated into the Draft LEDPA is not discussed; the advantages or disadvantages, environmental and economic, are not reviewed; no reasons for preferring the suggested LEDPA alternative in San Martinez Grande, or not preferring alternative 5 in San Martinez Grande, are given.

The Regional Board strongly encouraged consideration of Alternative 5, in which impacts within the waters of San Martinez Grande and its associated tributaries due to channel widening would have been decreased. We still find that the smaller loss of water in the Alternative 5 for San Martinez Grande is preferred. Why does the ACOE and CDFG find this not to be preferred?

Responses 8 & 9 - Chiquito Canyon

There is no substantive response to this comment. The Final EIS/EIR response (No. 8 & 9) to our comment letter only summarized our comment and included standard language.

The Regional Board strongly encouraged for the road crossings, bridges instead of culverts. We still find that the value of span bridges over culverts, as proposed in Alternative 6, is preferred. Why does the ACOE and CDFG find this not to be preferred?

Low-Impact Development - Response 11

The Regional Board submitted specific comments on the necessity of Low-Impact Development (LID) implementation which have not been sufficiently developed in the Draft LEDPA. The analysis presented in the Final EIS/EIR is inadequate in its scale and content. In order for the Regional Board to determine whether the final project will achieve water quality standards, more detail is needed beyond the conceptual level presented in the Final EIS/EIR.

Our expectations of the Water Quality Technical Reports and Drainage Concept Reports (WQTR and DR) in the EIS/EIR were established in our letters to Newhall Land and Farming Company and County of Los Angeles Department of Public Works dated November 26, 2007, and May 20, 2008, respectively.



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California Department of Fish and Game
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The Final EIS/EIR response (No. 11) to our comment letter states, "More specific implementation detail will be provided at the Village, Land Use, and Lot/Parcel scale in future, project-specific stormwater plans." The Regional Board maintains that in order to develop the LEDPA, the project-specific stormwater mitigation measures (during construction, post construction and maintenance) must be clearly demonstrated and transparent within this level of alternative analysis. The plan should include specific LID components to be incorporated into the proposed project at the lot and parcel levels. These components should fulfill the current requirements of the Los Angeles County MS4 Permit for new development, at a minimum, and should include in much greater detail (village level and landuse scale) information on post-development site design/low impact development strategies, hydromodification control project design features, source control BMPs, and treatment BMPs.

Specifically, the WQTR and DR must include village concept-level Best Management Practices (BMPs) to manage and treat storm water including hydromodification control measures into the development of the Specific Plan area. These source control BMPs, project design features (PDFs), LID strategies and hydromodification control measures must fulfill Part 4 section D Development Planning requirements of the Los Angeles County MS4 Permit.

The WQTR and DR should:

- Discuss and relate at village-scale how drainage water quality using typical design for wet and/or dry extended detention basins combined with on-site controls provide greater overall water quality improvements and higher levels of treatment of storm water runoff.
- Provide schematic drawings and describe in the WQTR of the typical design for wet and/or dry extended detention basins combined with on-site controls are placed and located for the five villages.
- Provide schematic drawings and describe in the WQTRt how the parks and open space areas combined with on-site controls provide for overall water quality treatment and improvements for storm water runoff.
- Describe the long-term plan for maintenance of water quality control measures and any maintenance agreements with property owners and home owners associations.



Dennis Bedford,
California Department of Fish and Game
Aaron Allen,
US Army Corps of Engineers

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Water Quality

The Regional Board submitted specific comments on water quality. Several aspects of these improvements or additions were not included in the Final EIS/EIR.

Response 13

The Final EIS/EIR response (No. 13) to our comment letter reviewed the water quality listings in much more detail than in the draft EIS/EIR. These important additions should be included in the final EIS/EIR and not just in the response to comments.

Response 15

The Final EIS/EIR response (No. 15) to our comment letter reviewed the water quality data in a more valuable way than in the draft EIS/EIR by including the number of exceedances of water quality standards in addition to the average values. These important new and improved tables (with, in addition, the number of samples taken) should be included in the final EIS/EIR and not just in the response to comments.

Also, the Final EIS/EIR has not adequately addressed Part 4.D - Development Planning of the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit. Specifically, the Final EIS/EIR did not provide adequate analysis regarding how the increased stormwater runoff volume under the proposed conditions (3,356 ac-ft annual runoff volume with developed PDFs) would be mitigated in order to mimic pre-development hydrology. Absent this analysis and a plan to control runoff volume, Section 4.4 of the EIS/EIR is technically deficient and the proposed development plan would be in violation of Part 4.D of the Los Angeles County MS4 Permit. Specifically, the Final EIS/EIR should:

- Provide more hydrologic in-depth analyses and discussion in the FEIS/EIR on the runoff volume control in combination with proposed village scale treatment train of BMPs.
- Provide in the WQTR, the details and general procedures of the hydrologic analyses of typical on-site designs at landuse-scale level that (1) specify storm water better site design practices and techniques; (2) conserve and utilize natural features of the site and (3) apply low impact development methods and (4) reduce impervious cover.
- Discuss which improved site design techniques will be implemented to reduce storm water post-development runoff, for instance: reducing residential street widths from the standard practice of 36 feet to 26 feet, revisiting open space ordinances, providing vegetated open channel or dry swales at street right-of-way, minimizing the parking demand ratios for large retailers, and single-family homes, reducing overall



Dennis Bedford,
California Department of Fish and Game
Aaron Allen,
US Army Corps of Engineers

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imperviousness in parking lots and amending parking lot codes, redirecting rooftop runoff to pervious areas to the maximum extent practicable.

Bacterial Indicators and Pathogens

The Regional Board submitted specific comments on bacterial indicators. While several complete responses were made in response to our comments, several of these improvements or additions were not included in the Final EIS/EIR. In general, we find that your section on bacterial indicators is still dismissive of the genuine, well-documented, human health risk of exposure to water contaminated with high levels of fecal-indicating bacteria. The important issue of sources of fecal-indicating bacteria to the Santa Clara River remains inadequate.

Response 17

The Final EIS/EIR response (No. 17) to our comment letter included a small discussion of possible sources of bacteria to the Santa Clara River but did not directly address why the water quality sampling showed such high levels of bacteria. The small discussion of potential reasons for these exceedances (*"Elevated fecal indicator bacteria densities observed in the tributaries to the Santa Clara River monitored at Stations A through E should be attributed to livestock grazing and natural sources, specifically wildlife, birds, and soil erosion. Fecal indicator bacteria densities are often further elevated due to instream growth facilitated by the presence of organic matter and warm water temperatures (SCCWRP, 2007). Septic systems associated with development in the Val Verde area may also lead to increased fecal indicator bacteria densities in Chiquito Canyon (Station E)."*) should be included in the Final EIS/EIR, itself.

In addition, natural watersheds are unlikely to produce frequent exceedances or large exceedances of bacterial water quality standards. The recently adopted Santa Clara River bacteria TMDL¹ included a source assessment and the data from Sespe and Piru Creeks, which represent natural landscapes in the watershed, showed no exceedances of bacteria objectives. Data examined for the sources assessment of this TMDL from storm drains and channels draining urban areas in the watershed showed levels of bacteria that exceed objectives. In addition to this local data, data from studies conducted throughout the Los Angeles Region and Southern California demonstrate that bacteria concentrations are 2-3 orders of magnitude greater in developed areas than in natural areas.

Response 18

¹ The Santa Clara River bacteria TMDL was adopted by the Los Angeles Water Quality Control Board on July 8, 2010. The TMDL will be effective after approval by the State Water Resources Control Board, Office of Administrative Law and USEPA.



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The Final EIS/EIR response (No. 18) to our comment letter included data tables which showed the geometric mean for bacteria as opposed to the mean. These important improvements should be included in the final EIS/EIR and not just in the response to comments.

Response 20

We find that the section on bacterial indicators is still dismissive of the genuine, well-documented, human health risk of exposure to water contaminated with high levels of fecal-indicating bacteria. However, the important part of your response (and in the changes you made to the Final EIS/EIR) is the "Project Design Features that Address Pathogen Indicators." We note that the recently-adopted bacteria TMDL for the Santa Clara River establishes Waste Load Allocations based on allowable exceedance days for Reaches 3, 5, 6, and 7. The MS4 permit which governs the development of the Newhall Land Specific Plan area will have to comply with all the requirements of the TMDL once effective.

Beach Replenishment/Sediment Management - Response 23

The proposed LEDPA does not adequately meet water quality objectives for sediment management.

According to the DEIS/EIR, "sediment loading from tributaries is difficult to predict." The numerical value given in the RMDP for a net reduction in sediment loading to Santa Clara River of 9,966 tons per year is questionable and needs to be further analyzed.

The response to the comment regarding sediment management is as follows: "Sediment from upland sources, such as debris basins and other sediment retention activities would be managed by the Department of Public Works."

Currently, Los Angeles County Department of Public Works is challenged with finding locations for sediment placement for its current facilities. In addition, fires within Los Angeles County have contributed to the sediment loading within Los Angeles County water courses. There is currently not enough sediment placement space.

The transfer of responsibility to a County-wide sediment management system which is not currently meeting its own requirements will not be adequate. Also, the consideration for future fires within the Project watersheds has not been thoroughly analyzed. The need for additional sediment management measures associated with sediment overloading due to fires is not within the current LEDPA or any other alternatives.

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Therefore, Response 23 does not adequately address the concerns raised regarding sediment management or answer the questions directly as to how sediment will be managed. The following questions were never addressed:

- How will beach replenishment be quantified?
- Is there a specific study to be developed to determine if sediment should be passed through the systems or placed at key sites for beneficial beach replenishment?
- Where will sediment and/or debris removed from flood control structures be placed?
- A Maintenance Plan will need to be developed for the purpose of scheduling and determining capacity requirements for debris basins, and flood control channels.

Given the available information and the potential impacts to the Santa Clara River and its tributaries, Regional Board has determined that the Draft LEDPA as presently proposed, has the potential to cause adverse impacts to water quality and aquatic resources. We note that, the Alternatives which would currently meet the 404(b)(1) Guideline requirements would be either a compilation of Alternatives which would comprehensively cover all of the above concerns, or Alternative 7.

As the ACOE and CDFG complete the CEQA, NEPA and LEDPA processes, and we plan for the upcoming permitting and certification process by this Board, we find we still have significant concerns which need to be addressed before the completion of our part. We expect that the completion of the CEQA/NEPA and LEDPA process and the application to this Board for Waste Discharge Requirements (WDR) and CWA Section 401 certification will answer our remaining concerns.

For the purposes of our permitting and certification requirements, Newhall Land will need to demonstrate that the final project will avoid and minimize impacts to waters to the maximum extent possible per our concerns as described above. In addition to the avoidance and minimization of impacts generally, a specific concern of downstream hydromodification impacts includes the Newhall Ranch projects' potential to negatively effect the large and important restoration project of the State Coastal Conservancy's Santa Clara River Parkway. Fourteen miles of river (3,000 acres) have been acquired at an approximate cost of \$15 million in State dollars in addition to federal resources. This restoration project which will enhance the beneficial uses of the river, is immediately downstream of the Newhall Ranch proposed development.



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In addition, the final project will need to include mitigation to satisfy the mitigation requirements as in the ACOE 2008 Mitigation Final Rule. Any mitigation proposed must include the 12 fundamental components: site selection criteria; site protection instruments (e.g., conservation easements); baseline information (for impact and compensation sites); credit determination methodology; a mitigation work plan; a maintenance plan; ecological performance standards; monitoring requirements; a long-term management plan; an adaptive management plan; and financial assurances. If the mitigation plan in the final project includes "reconstructed" drainage channels, the evidence provided will need to ensure the replacement of functions and values of the pre-existing natural channels. The current analysis fails in this regard. In addition, the final project and the applications for permitting from this agency, will need to demonstrate the all actions will be taken which are necessary to achieve the targets of the adopted TMDLs for the Santa Clara River. Our analysis of the ability of the Newhall Land development to achieve TMDL targets is continuing.

We look forward to working with the Army Corps' of Engineers and the California Department of Fish and Game to address water quality and aquatic habitat concerns for both the completion of the CEQA process and the CWA Section 401 certification process. Should you have questions concerning this letter, please contact Valerie Carrillo at (213) 576-6759 or LB Nye at (213) 576-6785.

Sincerely,



Samuel Unger
Interim Executive Officer

cc: Eric Raffini, US Environmental Protection Agency

California Environmental Protection Agency



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